



REPORT

ON THE

Public Health Administration of Burma

FOR THE YEAR 1928.

Rangoon
Supdt., Govt. Printing and Stationery, Burma
1929.

Price,—Rs. 3 = 4s. 6d.]





REPORT

ON THE

Public Health Administration of Burma

FOR THE YEAR 1928.

Rangoon
Supdt., Govt. Printing and Stationery, Burma
1929.

LIST OF AGENTS FOR THE SALE OF GOVERNMENT PUBLICATIONS.

IN BURMA.

AMERICAN BAPTIST MISSION PRESS, Rangoon.

BISWAS & Co., 30, Lewis Street, Rangoon.

BRITISH BURMA PRESS BRANCH, Rangoon.

BURMA BOOK CLUB, LTD., Post Box No. 1068, Rangoon

INTERNATIONAL BUDDHIST BOOK DEPÔT, Post Box No. 971 Rangoon

MODERN PUBLISHING HOUSE, LTD., Rangoon.

NEW LIGHT OF BURMA PRESS, 49, Phayre Street, Rangoon.

RANGOON TIMES PRESS, Rangoon.

MAUNG LU GALE, Law Book Depôt, 42, Ayo-o-gale, Mandatay.

CHAPPLE'S BUSINESS COLLEGE, 377, Lower Main Road, Moulmein.

IN INDIA.

BOOK CO, LTD., 4/4A, College Square, Calcutta.
BUTTERWORTH & Co. (India), LTD., Calcutta.
S. K. LAHIRI & Co., 56, College Street, Calcutta.
W. NEWMAN & Co., Calcutta.
THACKER, SPINK & Co., Calcutta and Simla.
D. B. TARAPOREVALA, SONS & Co., Bombay.
THACKER & Co., Ltd., Bombay.
HIGGINBOTHAM & Co., Madras.

IN EUROPE.

The publications are obtainable either direct from the Office of the HIGH COMMISSIONER FOR INDIA, 42 Grosvenor Gardens. London, S.W. 1, or through any booksellers.

TABLE OF CONTENTS.

REPORT ON THE PUBLIC HEALTH ADMINISTRATION OF BURMA FOR THE YEAR 1928.

[Sections I to IV, VII and VIII omitted.]

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

						PARA.	PAGE
Area and General Popu	ılation	• • •	•••	•••	• • •	1	1
Migration	•••	•••	•••	•••	•••	2	2
Rainfall	• • •	•••	•••	•••	•••	3	ib.
Cost of Rice	•••	•••	•••	•••	•••	4	ib.
Statistics within Railwa	ay Limits	•••	•••	• • •	•••	5	3
Inspection of Birth and	d Death Reg	isters	***	•••	•••	6	ib.
Registration of Vital St	atistics in Ba	ackward	l Areas	•••	•••	7	ib.
Birth and Death Rates	in several P	rovince	s in India	•••	***	8	4
Provincial Birth, Death	and Infant	Mortali	ty Rates	•••		9 °	ib.
Provincial Birth Rate	•••	•••		•••	•••	10	ib.
Rural Birth Rate	•••	•••		•••	•••	11	5
Defects noticed in the	Registration	of Vital	Statistics	•••	•••	12	6
Urban Birth Rate		•••	•••	•••	•••	13	7 -
Still-births	•••	•••	•••	• • •	•••	14	8
Provincial Death Rate		•••	•••	•••	•••	15	ib.
Rural Death Rate	•••	•••	•••	•••	•••	1 6	ib.
Urban Death Rate	•••		•••	•••	•••	17	10
Infant Mortality (Provi	ncial)		•••	• • •	•••	18	11
Infant Mortality (Rural)	•••	•••	•••	• • •	18A	ib.
Infant Mortality (Urban	n)	• • •	•••	•••		18B	1
Voluntary Child Welfa		•••	•••	•••	••	19	14

SECTION VI.

HISTORY OF CHIEF DISEASES.

Incidence of Chief D.	iseases in Bi	ırma	***	000	• • •	20	15
Cholera (Provincial)	•••	•••	•••	***	•••	21	ib.
Cholera (Rural)	•••	899	•••	•••	***	22	ib.
Cholera (Urban)	•••	•••	•••	•••	•••	23	17
Anti-Cholera Inocula	tions	•••	***	•••		24	ib.
Small-pox (Rural)	•••	•••	***	• • •	•••	25	18
Small-pox (Urban)	•••	• • •	•••	• • •	***	2 6	19
Small-pox treated in	Hospitals	•••	•••	002	• • •	27	ib.
Plague (Provincial)	•••	•••	• • •	•••	•••	28	ib.
Plague (Rural)	•••	•••	•••	•••	•••	29	20
Plague (Urban)	•••	• • •	•••	•••		30	ib.

TABLE OF CONTENTS.

SECTION VI—contd.

HISTORY OF CHIEF DISEASES—contd.

PARA. PAGE

						I ANA.	IAGE
Anti-plague Inoculations	;	• • •	•••		•••	31	22
Fevers	***	• • •	• • •	• • •	•••	32	ib.
Cinchona Febrifuge and	other Tab	lets	• • •	•••	• •	33	24
Dysentery and Diarrhoe	a	• • •	• • •	•••	•••	34	25
Respiratory Diseases	• • •	•••	• • •	1 • •	• • •	35	ib.
Beri-beri	• • •	• • •	• • •	• • •		3 6	26
Yaws	•••	• • •	• • •	• • •	• • •	37	ib
Leprosy	• • •	• • •	• • •	• • •	• • •	38	27
Venereal Diseases	•••	• • •	• • •	• • •	• • •	39	ib.
		SECTION	J IX				
		ODOTION	121.				
	Civ	IL SANITAR	Y WORKS.				
Evnanditura on Civil Sa	mitary Wa	n1ra				40	28
Expenditure on Civil Sa Provincial Public Health	-		• • •	•••	• • •	41	ib.
		. • •	• • •	• • •	• • •	42	<i>ib.</i>
Public Water Supplies Conservancy	• • •	e * *	• • •	• • •	• • •	43	30
Anti-Malarial Operation	•••	• • •	• • •	• • •	• • •	44	ib.
Port Health Department		• • •	* • •	• • •	• • •	45	31
For Hearin Department	1	•••	• • •	• • •	• • •	73	31
۰							
		SECTIO	N X.				
DEPCO	MAT PROCE	PPDINGS AN	ND GENERA	т Ремария			
1 EKSO	NAL I ROCI	EEDINGS AF	ND GENERA	L NEMARKS	•		
Director of Public Healt	th and Assi	istant Direc	ctors of Pub	lic Health	•••	46	32
Work of the Hygiene P	ublicity Bu	ıreau		•••	• • •	47	ib.
Medical Officer of Fairs	and Festi	val s	• • •	•••	•••	48	33
Assistant District Health	h Officers	•••	400	•••	•••	49	34
Scheme for Urban and	Rural Heal	Ith Officers	*** '	•••	•••	50	ib.
Epidemic Sub-Assistant	Surgeons	•••	1		• • •	51	35
Public Health Inspector	rs	• • •	• • •	•••	•••	52	36
Inspection of Plans of C	Governmen	t Buildings	S	•••	•••	53	ib.
Medical Inspection of S	chools and	School Ch	ildrén	•••	•••	54	37
Sanitary condition of M	ines	• • •	4	• • •	•••	55	ib.
The Burma Ghee Adult	eration Act	t of 1917	• • •	•••	•••	56	ib.
The Burma Food and I	Drugs Act,	1928		•••	•••	57	38

1

0.17, 20_01



RESOLUTION

ON THE

Report on the Public Health Administration of Burma

For the year 1928.

Extract from the Proceedings of the Government of Burma, Public Health Department—No. 171S29, dated the 28th September 1929.

READ-

The Report on the Public Health Administration of Burma for the year 1928.

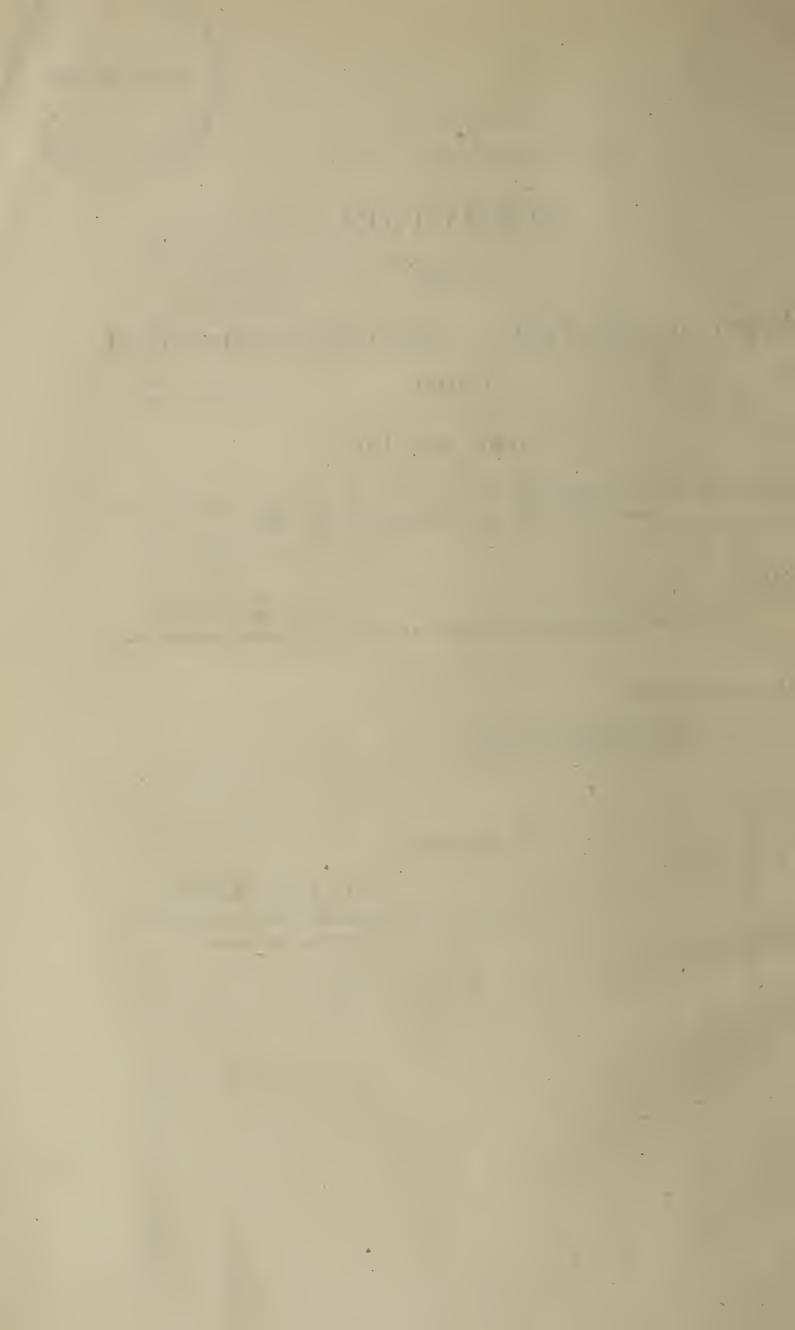
RESOLVED THAT—

The Report be published.

By order.

F. H. STEAVENSON,

Secretary to the Government of Burma, Education Department.



Report

ON THE

Public Health Administration of Burma

FOR THE YEAR 1928.

[Sections I to IV are, as usual, omitted in compliance with the instructions contained in Government of India, Home Department, letter No. 19 (Sanitary)—260, dated the 4th September 1878. Section VII is separately reported upon and Section VIII is not controlled by this Department.]

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

1. Area and Population.—The total area under regular registration

Year.	1	Population.	
	Rural.	Urban.	Total.
1927 1928	9,575,398 9,568,988	1,247,220 1,253,630	10,822,618 10,822,618

remains the same as in previous years, namely 115,060 square miles, and for purposes of this report the 1921 census figure of 10,822,618 remains the same as last year. The relative areas and population classified as rural and urban have been

modified during the year by the transfer of Chauk to the urban area on its being constituted a notified area in October 1927 and the extension of the boundaries of the towns of Thôngwa and Pyapôn. The effect upon the populations is as shown in the margin.

The returns of some of the backward districts, where registration is not sufficiently accurate to be included in the main statements, including those in which a primitive system of registration by tally sticks was introduced in 1922, affecting a population of 2,337,446 and an area of 116,935 square miles, are shown in Statement II (a).

2. Migration.—As usual the vast majority of the immigrants (385,623)

	Total	Total
Year.	immigrants.	emigrants.
927 1928	428,343 418,698	361,291 333,006
	- 9,645	- 2 8,285

entered through Rangoon, while out of 291,162 emigrants from the Port of Rangoon 263,345 were destined for Indian ports. The figures for the other ports are shown below:—

and a	Ports.		Immigrants.	Emigrants.
Akyab Kyaukpyu Tavoy Mergui Moulmein Bassein	•••	•••	29,196 1,825 183 843 1,028 Nil.	39,123 2,064 187 470 Nil.

3. Rainfall.—Hitherto the figures of rainfall for Burma published in this report have been based upon the readings of 17 Government of India Meteorological Observatories, but it is proposed that from this year onwards the records published by the Commissioner of Settlements and Land Records, based upon observations at 233 stations, will be taken as the basis. The provincial mean for 1928 was 93 79 inches. Heavy rainfall for the year was recorded in the following districts:—

•		Inches.			
Amherst	•••	202.84 202.21	and low rainfall v	vas re	corded in
Sandoway Thatôn	,•••	199.35			Inches.
Kyaukpyu Tavoy	•••	194·81 194·23	Magwe	• • •	29.83
Mergui Pegu		144.63 140.38	Minbu Myingyan	•••	30·08 33·38
Toungoo	•••	132 [.] 57 125 [.] 78	Meiktila Pakokku	•••	33·47 38·66
Akyab A.H. Tracts		125.78	Lower Chindwin	•••	42·07 43·59
Hanthawaddy Salween	•••	122·53 120·62	Kyaukse Sagaing	•••	44.80

4. Cost of Rice.—The average cost of rice per basket was Rs. 5 against Rs. 5-6-0 in 1927. The highest average price was reported from the Kyaukpyu District, although even there a drop of annas 8 per basket occurred compared with 1927. The lowest average price (Rs. 3-14-0) was in the Tavoy District. With the exception of the Pakôkku, Meiktila and Yamèthin Districts, which all show a slight increase, the price of rice dropped throughout the province. Highest prices in thelyear were in the months of November and December, when the average was Rs. 5-4-0, while the lowest price of Rs. 4-12-0 was

obtained in July and August. In spite of a marked fall in the price of the staple foodstuff during the year, the death rate increased by 1.73.

- 5. Statistics within Railway Limits.—In a railway population of 8,395 living outside municipal and notified areas, the birth rate was 19'77 compared with 26'80 in 1927, and the death rate was 10'84 compared with 7'68 in the previous year. The highest mortality was recorded in the railway population at Kyaukse (66'18) and the lowest at Shwebo (1'38). The significance of these figures is reduced by the fact that they are based upon a very small population.
- 6. Inspection of Birth and Death Registers.—Out of a total of 35,076 villages and towns in which vital statistics are registered, the records were inspected by the District Health staff in 11,488, a figure which compares with 11,192 in 1927. The following districts, in order are those in which the largest amount of verification of vital statistics was carried out, the numbers following the names referring to the actual number of entries verified in the register:—Myaungmya (28,264), Bassein (20,094), Lower Chindwin (18,711), Prome (18,465), Henzada (17,605), Shwebo (17,549), Pakôkku (15,889) and Magwe (15,528). No verification has been carried out in Ma-ubin District, and very few entries have been verified in Pyapôn, Tavoy, Thayetmyo, Yamèthin and Kyaukpyu Districts. This matter is being taken up with the District Health Officers concerned.

In Prome District, 899 omissions were detected by the District Health staff and 110 by other district officers, and on account of greater activity in verification work, both birth and death rates, show an increase. It is unbelievable that in the Shwebo, Magwe, Myingyan, Akyab and Kyaukse Districts, the registration work was so good that no omissions to register occurred, and yet the reports state that not a single omission was detected by the Public Health staff in any of these districts. The legitimate conclusion is that verification work was very badly done in these districts and this matter also will be taken up with the district officers concerned. A curious discrepancy is reported from Thatôn District, where the Public Health authorities are reported to have verified 6,800 entries and detected only 31 omissions, while other district officers verified 3,395 entries and detected 142 omissions.

There were 2,484 prosecutions of parents and guardians for neglect to report births and deaths, and in 2,138 instances fines were inflicted. Seventy-five headmen were prosecuted for slackness in registration work and 25 were fined.

7. Registration of Vital Statistics in Backward Areas.—The tally system described in previous reports has been in force in the Hill Districts of Arakan, Chin Hills, Pakôkku Hill Tracts and Northern Shan States. In the Northern Shan States, a step forward has been taken by

the Assistant Superintendent, Taungpeng and Momeik States, in introducing registers in each large village. The tally system does not work so well in the Arakan Hill Tracts where a few chiefs still plead inability to understand and follow it. On the whole, however, the results in these areas are more satisfactory this year than last. The returns from the Salween, Bhamo, Myitkyina, the Upper Chindwin and the Southern Shan States, which are not sufficiently accurate to be included in the main statements, together with the returns from backward tracts where the tally system is in force, are published in Statement II (a).

8. Birth and Death-rates in the several Provinces of India.—As usual the Central Provinces return the highest birth (46'51) and death (33'66) rates and also the highest infant mortality (238'41). Burma records the lowest birth-rate (25'86). Its death-rate (21'28) is also the lowest, barring the North-Western Frontier Provinces (19'31). Its recorded infant death-rate (209'50) is very high, being exceeded only by the Central Provinces.

Statements I, II, VIA, VIB, VIB a).

9. Provincial Birth, Death and Infant Mortality Rates-

-		1924.	1925.	1926.	1927.	1928.
	Rural	27.44	25.14	27.43	24.70	25.41
Birth {	Urban	27.11	27.26	28.75	27.98	29:33
	Provin c ial	27.40	25.38	27.59	25.08	25.86
(Rural	19.50	16.77	18.78	17.38	18.82
Death	Urban •••	37.51	34.22	37.41	36.21	40.08
	Provincial	21.54	18 ⁻ 75	20.92	19.55	21.28
*	Rural	184.34	175.53	186.20	184.34	192.13
Infant Mortality.	Urban	305.03	286 [.] 16	310.58	291.01	324.37
	Provincial	197.86	188.99	201.40	198.06	209.50

It will be seen that the death-rate in urban areas is nearly double that in rural. Probable causes are: (1) rural areas are more healthy than towns, and (2) better registration of deaths in towns, many of which have cemetery-caretakers who act as a check on the registration.

Le vital index for the province, $(\frac{\text{births} \times 100}{\text{deaths}}) = 121.53$ and the decennial average = 120.88.

Statement I. 10. Provincial Birth-rate.—1927, 25'08; 1928, 25'86. The proportion of male to female births was as last year 105 to 100. This year's birth-rate is 1'13 below the five-yearly average.

11. Rural Birth-rate.—The marginal table shows the last five years' Statement 1923 ... 29.90 figures. The figure for 1928 is 25.41.

1924 ... 27.44 1925 ... 25.14 1926 ... 27.43 1927 ... 24.70

Nineteen districts recorded an increase, out of which 5 are in Upper Burma and 14 in Lower Burma. Out of 11 districts recording a decrease, 4 are in Lower Burma and 7 in Upper Burma.

Birth registration in villages is far from being satisfactory and it is necessary in the near future to take steps to make the figures more accurate. Paragraph 12 gives some of the defects noted in village registration.

It is notable that Prome returns its highest birth rate since 1910, the increase being 3'49 over last year's figure. This is in the main due to the personal interest displayed in the registration of vital statistics by the Deputy Commissioner (Mr. J. K. Stanford, M.C., I.C.S.). This officer issued definite instructions to each Township Officer under him to check a minimum of one village-tract each week. He also interested himself in the work of vaccinators with beneficial results. He writes: "I have paid close attention this year to the regulation of vital statistics in all villages visited. Omissions found probably amount to 10 per cent. of the entries checked and in some cases more. The blame does not always lie with the villagers as it is supposed to do. I have met several cases where a man made a journey of two or three miles to report a birth; either he found the headman was away from home or told the headman's wife who failed to report it: or else he even received a counterfoil and the headman failed to register the birth. I also found numerous instances (which were in turn reported to the District Health Officer) of large village tracts which had not recorded a single birth for a period of one to three years, a fact which had apparently eluded two or three so-called checks by the vaccinator, and others in which no vaccinator had been for six years for any purpose at all." The Local Government has been requested to issue a circular letter to all Deputy Commissioners on the subject of the improvement of registration of vital statistics.

In the Amherst District, the Deputy Commissioner writes: "Both Township Officers and Subdivisional Officers have been personally instructed to take an interest in the registration of births and deaths, but I am afraid that only a very few seem to have realised their duties in this respect. It is intended to take stricter measures now." Action is being taken to ascertain the precise measures the Deputy Commissioner has in view.

In Kyaukpyu, the Deputy Commissioner remarks: "Compilation of these statistics is left too much to the clerks. Township Officers must

give their personal attention So far the vaccination staff have done very little to bring to light the failures in this respect." While the Deputy Commissioner points out the general slackness in registration of births and deaths in this district, it is significant that the district officers, apart from the public health staff, have done no verification work at all.

In Pegu the figures noted in the margin indicate progressive deterioration of registration since 1920. 33.77 1920 It is obvious that some action on the 1921 29.43 1922 29.25 part of the Deputy Commissioner similar 1923 26.58 1924 to that taken by Mr. Stanford in Prome 26.69 1925 22.29 is urgently required and the Deputy 1926 23.96 Commissioner is being addressed on the 1927 21.09 1928 18.92 subject.

Shwebo records a pleasing increase over the figures for last year, but there is still ample room for improvement.

- 12. Defects noticed in the Registration of Vital Statistics.—(1) Inspecting officers not infrequently find it difficult to check the vital statistics in a village for the reason that the headman of the village-tract resides in the main village some distance away. The remedy for this would appear to be to supply the Ywagaungs of special villages with registers.
- (2) Numerous cases are found in which the village headman does not copy the entries from the counterfoils of the certificate books into his register. More frequent and more systematic check by district officers will help to stop this neglect.
- (3) Serious delay is frequently encountered in submission of the counterfoils. In Pyapôn, it is noteworthy that a beginning has been made of sending the counterfoils through the post, and village headmen have been supplied with service stamps for the purpose. This system can be extended wherever postal facilities exist.
- (4) Vaccinators in many cases are chary of incurring the enmity of village headmen by reporting omissions on their part to register births and deaths. It is desirable that in all cases where many omissions are detected, the vaccinators report directly to the Inspector of Vaccination who is in a stronger position to deal with the question.
- (5) It is evident that in far too many cases vaccinators, when they visit a village, do not make house-to-house inspections but merely content themselves with having the children collected at a convenient centre where they verify the names only of those who are present. This is obviously inadequate for only by house-to-house inspection can thorough verification be carried out.
- (6) Difficulty in verification of births frequently occurs owing to the fact that the children's names are not entered in the birth register.

This is a point which is always cropping up owing to the Burmese system of naming children sometime after birth, and it seems desirable to fix a time within which children must be named. Possibly this might be done under rule 3, at page 40 of the Village Manual.

Statement VIB.

13. Urban Birth-rate.—The rate for the Province is 29'33 which compares with 27'98 in 1927 and with a mean figure for the last five years of 27'52. Considerable increase is seen at Thônzè +11'68, Myinmu +10'10, Shwegyin +9'21, Salin +7'91, Myitngé +7'85, Kyangin +6'23, Pyu +5'99, Prome +5'98, Minbu +5'37 and Allanmyo +5'36. Decreases in birth rate are recorded from Pyapôn -4'40, Minhla -4'18, Shwebo -3'86, Kanbe -3'64, Pakôkku -2'98 and Ye-u -2'92. The following towns, in order show the highest birth-rates in Burma:—Ye-u (52'15), Mandalay (51'89), Kawkareik (47'67), Myitngè (44'49), Thônzè (43'98) Shwebo (42'72), Taungdwingyi (42'66), Maymyo (42'52), Kyauksè (41'10).

It is necessary to call attention to certain towns whose birth rate is remarkably low. The first of these is Chauk with a birth-rate of 13'00. This town consists predominantly of labourers employed in the oil fields and there is no reason to suspect that its birth-rate is greatly underestimated. Unfortunately the same cannot be said of the other towns which record a remarkably low birth-rate. These are Kamayut (14'04), Akyab (14'93), Thamaing (18'74), Danubyu (19'72) and Gyobingauk (19'83). The first two were constituted notified areas in 1925, Although both these notified areas may claim that they contain an abnormally high proportion of male Indian immigrant labourers, there can be little doubt that the system of registration of births is defective. The attention of the Committees of these two areas is being directed to this point and it is hoped that better figures will be recorded for next year.

Danubyu, which is a characteristic Delta town, has bye-laws for the registration of births and deaths, but the registration of births in this town must be very perfunctorily carried out. The Committee must take the matter in hand.

In Gyobingauk, the bye-laws are being amended in accordance with the Government Model Bye-laws and it is hoped that considerable improvement will result from their enforcement.

Sixteen other towns returned birth-rates below 25.

In Letpadan, Shwedaung and Paungdè, commented upon in last year's report, there is some improvement this year. In Shwedaung, the Vaccinator detected 7 omissions to register births, but no prosecutions could be instituted in the absence of bye-laws. Regarding Paungdè the Deputy Commissioner, Prome, remarks: "The less said about the sanitary affairs, the better. It is still very difficult to believe that in a town of 14,150 people only 287 births occurred." The Sub-Assistant Surgeon of Paungdè has not been co-opted as a member of the new

Committee. If the Committee is not prepared to co-opt the resident Government Medical Officer and avail itself of his services as Health Officer of the town, then it should appoint a full-time Health Officer under the half-pay grant system. If it fails to do so, or to invest its Health Officer when appointed with adequate powers including those of prosecution for offences against public health, it neglects its duties and Government action will become necessary.

In Nyaunglebin, the vital statistics require the serious attention of the Committee. The birth-rate is 22.68, the death-rate 62.43 and the infant mortality rate 629.41. A Second Class Health Officer was appointed from the 2nd of February 1929, and one of his first duties will be the checking of the vital statistics of the town.

The attention of the Zigôn Municipal Committee is drawn to the returns of its birth-rate, which show marked fluctuations, explicable only on the grounds of inefficient registration. It returned a birth rate of 16.63 in 1925, 32.10 in 1926, 25.59 in 1927 and 22.85 in 1928.

Out of a total number of 71 municipalities and towns which exist in the Province, only 40 have adopted the Model Bye-laws for the registration of births and deaths. The desirability of having a uniform system is very considerable, and it is for consideration by the Local Government whether pressure should not be exerted to induce all towns to conform to a standard model.

14. Still-births.—The urban rate is 6'42 and the rural 0'36 per 100 live-births. The contrast is striking. Few still-births are registered in rural areas, although one or two headmen here and there have made an attempt to obtain the figures.

Deaths in Child-birth.—Four hundred and fity-four deaths were recorded from towns as due to child-birth, giving a rate of 12. 5 per 1,000 registered births as against 9.03 last year.

Statement II.

The increase is 1.73 above that of 1927 and 0.95 above the five-yearly average. The increased rate this year is distributed over all the major causes, the figures being cholera + 25, small-pox + 10, plague + 14, fever + 14, dysentery and diarrhœa + 10, respiratory diseases + 10, injuries + 03 and all other causes + 88.

Statement VI-A.

16. Rural Death-rate.—This year's Provincial figure and those for

1923 ... 19:02
1924 ... 19:50
1925 ... 16:77
1926 ... 18:78
1927 ... 17:38
1928 ... 18:82

Twenty-three districts record an increase over last year, while seven districts show a decrease. High rates are returned from the following eight districts:—

	Dis	tricts.		1928 rate.	Increase or decrease from last year.	Increase or decrease from 5-year average. (4)
-		(1)		(2)	(0)	
Kyaukse	•••	•••		35.42	+ 8.03	+ 3.43
Prome	•••	•••		26.92	+ 1.46	+ 5'29
Minbu		•••		25.74	- 1.44	- 1.71
Shwebo	•••	•••		25.20	+ 3.75	+ 3.23
Tavoy	•••	•••		24.96	+ 5.41	+ 4.92
Sagaing	•••	•••	•••	2 3·43	+ 6.98	+ 4.59
Mandalay	•••	•••		23.30	+ 3.87	- 1.32
Pakôkku		•••		23.27	+ 3.79	+ 1.35

In Kyaukse deaths from fever show an increase from 1,304 to 1,873. In Prome, the increase is mainly shown under "fever" and "all other causes", but as is pointed out elsewhere, the increased death rate in Prome should probably be regarded as the result of the pronounced improvement in registration. Minbu, though returning one of the highest death rates, shows a lower figure for 1928 than for 1927, the decrease being mainly under the heads of "fever" and "cholera". In Shwebo an increase of 3.75 over last year is due principally to "fever" and "all other causes". In Tavoy, an increase of 5'41 is recorded mainly under "fever". In Sagaing, epidemics of cholera, small-pox and plague are responsible for a considerable proportion of the increase, as is also fever. In Mandalay, there has been of recent years an increase in the diseases of the alimentary group due to insanitation. A sharp epidemic of cholera occurred during the year. In Pakôkku, the increase was largely due to "fever" but also to "cholera". In the following seven districts which returned particularly low death rates, it is noted that both birth and death rates have been dropping for a period of years and it is evident that the registration is markedly defective:

				المطاقة فيفاق المستحددات			
District. 1	1922.	1923.	1924.	1925.	1926.	1927.	1928.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tharrawaddy Death 22 Thatôn Birth 11 Kyaukpyu Birth 12 Henzada Birth 13 Henzada Birth 22 Myaungmya Birth 23 Hanthawaddy Birth 24 Hanthawaddy Birth 25 Birth 26 Birth 27 Birth 27 Birth 28 Birth 29 Birth 20 B	31·51 22·24 24·32 15·85 21·88 19·44 33·61 23·84 25·23 20·28 27·81 20·03 29·25 21·53	31·31 19·07 27·97 15·74 21·19 15·25 34·04 18·82 28·83 17·22 30·13 19·01 26·58 19·39	28·23 16·94 22·62 13·68 21·17 13·90 29·24 18·59 20·37 14·92 32·39 20·40 26·69 18·46	24·58 16·49 14·88 10·36 19·53 16·92 28·17 17·25 16·39 11·98 21·64 14·22 22·29 16·73	23 93 18·78 21·13 14·26 13·25 9·02 33·64 20·09 16·97 13·31 24·22 16·24 23·96 19·67	22.00 17.80 14.64 11.91 17.89 13.70 23.18 18.38 20.78 14.44 21.12 13.09 21.09 17.52	20.66 13.08 16.78 13.71 15.31 13.83 23.67 14.11 22.13 14.48 23.40 15.33 18.92 15.51

Statement VIB.

17. Urban Death-rate.—This rate (40'08) is the highest since 1921. Comparison with the urban birth-rate of the Province, which is 29'33 shows how extremely inaccurate the existing system of registration of vital statistics is. Even allowing for the large numbers of Indian immigrant labourers, it is obvious that there is something very seriously wrong with the recorded figures. As has been pointed out in a previous report the registration of deaths in towns is more efficiently performed than the registration of births, for the obvious reason that in the case of a death, the disposal of an unregistered body presents difficulties.

An analysis of the death-rate this year shows a marked increase in the principal disease groups, the actual figures for this increase being:—Respiratory diseases + '60, plague + '54, fevers + '42, cholera + '20, small-pox + '15, dysentery and diarrhæa + '13, injuries + '06, and all other causes + 1'77. We have had therefore an unhealthy year.

The excess in the high death-rates in certain towns calls for comment. In Pyapôn, the rate of 63.63 is the highest since 1910 and the figure is 21.35 above the mean for the last five years. The causes were principally cholera, plague, respiratory diseases, fever and dysentery. This town has no night conservancy system and its new water supply scheme has not yet been completed.

In Kyaikto the rate of 63'20 is 23'94 above the five year mean and 18'00 above the 1927 figures. Of this increase, plague only accounted for 4'46 and the balance appears attributable to general insanitary conditions. The town is a dirty one and general conditions require the urgent attention of the Municipal Committee.

Nyaunglebin shows a rate of 62'43. Comment has already been made on this town in connection with its birth-rate.

Taungdwingyi still shows a high death-rate of 58'99, which with the exception of 1927, when it suffered from a severe epidemic of small-pox, is the highest rate for 18 years.

In Pegu the rate is 58'13. Now that a Health Officer has been appointed there, it is hoped that some improvement will occur.

In Sagaing, with a death-rate of 57'43, the Committee agreed to appoint a Second Class Health Officer but changed its mind at the last moment. This is the headquarters town of the Sagaing Division and I have already advised the Committee that in my opinion a Second Class Health Officer is very necessary.

Pakôkku, which has a death-rate of 56.13, is the second largest town in Upper Burma, having a population of 19,507. It has no Health Officer. The Civil Surgeon offered his services but the Municipal Committeee declined them. Action by the Local Government appears necessary here to bring this Municipal Committee to a realisation of its responsibilities.

Prome, which shows a death-rate of 50'41, has been known as an insanitary town for many years. Some encouragement may be derived from the remarks of the Deputy Commissioner:—"The sanitary condition of Prome is still by no means satisfactory, but I think the Health Officer and the Committee are doing their best against the very heavy odds of public apathy, and sanitary conditions, which have been condemned as unsatisfactory for years."

The figures of Thatôn town are interesting and are noted in the Year.

Death-

Year.		Death-	margin.
1923	•••	rate. 27.83	I do not consider that these figures
1924		30.48	indicate a deterioration in sanitary condi-
1925	•••	33.79	
1926		36.38	tions since 1923 so much as an improve-
1927	•••	31 21	ment in the registration of deaths, and I
1928	• • •	41.22	am of opinion that the true death-rate here

is higher than that recorded for the current year. The inhabitants of Thatôn town maintain that it is a very healthy spot, and yet the District Health Officer remarks: "Most of the wells in the town are open both to surface and underground contamination. Cess pits are built without reference to situation of wells and kitchens. There are no conservancy lanes, street drains are kutcha and without proper gradient. There are no efficient drains connecting them with dwelling houses, and the filth remains stagnant as a rule in front of or behind the dwelling houses except when there are heavy storms." This town has a population of 15,000 and is urgently in need of a Health Officer armed with ample powers.

18. Infant Mortality (Provincial)—The figure for the year was Statements 198.06 for 1927 and 194.08 the five-yearly mean.

Percentage of infant deaths to total deaths						
Percentage of infant dea	iths under one	e month	to total			
infant deaths	•••	•••	• • •	26 86		
Percentage of infant	deaths between	en one a	nd six			
months to total infa	nt deaths	•••	• • •	53.57		
Percentage of infant des	aths over six n	nonths	•••	19.57		

It is particularly noteworthy that more than 80 per cent. of the total infant deaths occurred under six months, that is to say, before the child begins or should begin to take solid food. In this connection Dr. Saw Kyaw Zit, Assistant District Health Officer, Bassein, writes: "It is very usual for women in Burma, in their anxiety to have healthy children, to restrict their diet to rice and salt only during lactation. I think this voluntary semi-starvation generally practised by the over-anxious mother contributes much to the unhealthy condition of the suckling mother and consequent high infantile mortality."

18A. Infant Mortality (Rural).—The figure for the year was 192'13 against 184'34 for 1927 and 180'59 the five-yearly mean.

High rates were returned from:— Low rates were returned from:—

District. I		Ratio.	Increase or decrease from last year.	District.	Ratio.	Increase or decrease from last year.	
Kyaukse Pegu Prome Mandalay Minbu Sandoway Thayetmyo Yamèthin Toungoo L. Chindwin		251·14 250·39 248·02 241·19 238·63 230·97 220·47 218·94 218·05 217·16 200·70 200·07	+ 28·16 + 25·45 - 2·77 + 33·68 + 39·77 + 16·45 - 30·72 - 12·73 - 2·04 + 21·91 + 32·59 + 39·74	Mergui Amherst Tavoy Akyab Bassein Thatôn Magwe Myingyan	 105.25 124.56 136.24 153.93 154.81 161.20 167.56 167.86	+ 5.02 + 37.10 + 31.06 - 35.60 - 53.15 + 5.06 + 2.58 + 42.46	

Shwebo (251'14).—Birth-rate 33'62. Death-rate 25'50. This district records relatively high birth and death-rates, and, when compared with last year, the birth, death and infant mortality rates show an increase.

Kyauksé (250'39).—Birth-rate 42'58 (second in the Province). Deathrate 35.42 (first in the Province). The infant mortality rate in 1926 was 271'22, in 1927—224'94, but this year the figure has risen with birth and death-rates.

Pyapôn (187'86) which recorded an absurdly low ratio of 89'03 in 1927 has this year shown a marked statistical improvement.

Bassein (154'81).—The great fall in the infant mortality rate from last year (53'15) may be due in part to a drop in the recorded deathrate by 2.18 per mille owing to defective registration.

Pegu (248'02).—The high rate may be accounted for partly by the marked decrease in the birth-rate due to defective registration.

The recorded rates for rural areas should not be taken as indicative of the true situation because registration of births and deaths is in a very unsatisfactory condition.

Statement VIB (a

```
18B. Infant Mortality (Urban)—
                                                     Rate.
                                                     324.37
            1928
            1927
            Five yearly average
```

The percentage of infant deaths to total deaths was 23'74 compared with 22 in 1927, while the proportion of male to female infant deaths was 121 to 100. The urban infant mortality rate this year shows a rise of 33'36 per cent. over 1927. This may be in part due to the fact that the year was an unhealthy one, but since infant mortality is the number of deaths of infants under one year per 1,000 births during the year, the figure returned is dependent upon the degree of accuracy of registration of births. We have good reason to believe that in many of the towns, particularly the smaller towns which have not got Health Officers, the registration of births is negligently carried out, many births escaping registration, with the result that our infant mortality figures are unreliable. This remark applies with even greater force to the rural areas.

This year Chauk takes the place of dishonour in the list of towns with high infant mortality, with the figure of 712'33. This figure requires explanation especially in view of the great number of adult male labourers in the town. A house-to-house inspection is required.

Next to Chauk comes Nyaunglebin with a figure of 629'41 compared

Year.	Birth-rate.	Death-rate.	Infant mortality rate.	
1923	26.81	35·75	338·31	
1924	23.75	36·42	438·20	
1925	24.41	42·02	491·80	
1926	24.28	55·76	532·97	
1927	23.08	58·16	537·57	
1928	22.68	62·43	629·41	

with 537.57 in last year. This town has been recording a very high infant death-rate for the past four years, while the recorded birth-rate has been falling off. One of the most important duties of the recently appointed Health Officer wil¹

be the improvement of registration of births and deaths. The table in the margin illustrates the unsatisfactory figures for this town.

A similar state of affairs exists in Pakôkku which returns an infant

Year.	Birth-rate.	Death-rate.	Infant mortality rate.	
1922	28.66	29·37	209·30	
1923	27.78	28·09	287·82	
1924	26.09	38·60	333·99	
1925	28.76	48·55	377·90	
1926	29.94	45·06	390·41	
1927	27.89	43·88	483·45	
1928	24.91	56·13	532·92	

mortality rate of 532'92 this year. Here there is urgent need for the appointment of a Municipal Health Officer, and the figures marginally noted show the necessity to improve registration in this town.

In Kawkareik, where the infant mortality is reported to have risen from 403'39 in 1927 to 522'29 this year, the Municipal Committee has adopted the Model Bye-laws for the registration of births and deaths, and has engaged a cemetery caretaker and a whole-time registrar of births and deaths. What is required here is house-to-house checking of the figures by the registrar who apparently is not doing his work properly.

Other towns recording high rates are Magwe (492'98), Gyobingauk (473'68—which however is a marked reduction from the previous year's figures), Myingyan (447'82), Mônywa (426'83) and Pyinmana (414'40). In Insein the figure has jumped from 190'00 in 1927 to 303'23 in 1928. The reasons given by the District Health Officer are, neglect and ignorance of parents and the adulterated milk supply of the town. It is high time that Insein, which has a population of 14,308, appoint a full-time Health Officer.

Rangoon also shows an increase this year from 293'88 in 1927 to 340'69 in 1928. Premature birth, malnutrition and convulsions, bronchitis and pneumonia, diarrhœa and dysentery accounted for the evast majority of the deaths.

In Bassein, where the infant mortality has risen from 309'81 in 1927 to 341'03 in 1928, an attempt has been made to establish an Infant Welfare Society.

19. Voluntary Child Welfare Societies:—Rangoon.—This Society continued to carry out maternity work exclusively. A policy of expanding the work of this Society so as to include child welfare work in its proper sense is under consideration.

In Moulmein and Mandalay, the Societies also did mainly maternity work, but in both some effort is made to follow-up the children for a varying period after birth. The same remark applies to the Societies at Taunggyi, Sandoway, Magwe, Sagaing, Thôngwa, Thatôn, Kyauksè and Ma-ubin.

In Maymyo during the year the Lady Innes Maternity and Child Welfare Centre was opened. This centre is the first real Child Welfare Centre to be established in the country. The services of a Lady Health Visitor trained in Delhi have been obtained and good progress has been made.

In June 1928 the Child Welfare Society at Monywa gave up maternity work and confined its attention to the treatment and promotion of the health of babies under two years of age. The number of children treated in the Society's Clinic during the year was 3,118. The change appears to be a good one, as maternity cases are already dealt with by the Result-System Midwives under the supervision of the Civil Surgeon.

A proposal was placed before Government to engage the services of a Lady Health Visitor trained in England to organise a Training Class in Burma for Health Visitors. Until this is formed, it is impossible to proceed very far with child welfare schemes.

SECTION VI.

HISTORY OF CHIEF DISEASES.

20. Statement showing comparative incidence of chief diseases in Statements Burma during 1928 :— II, VI, VIB.

		Urban.		Rural.		Combined.	
'Names of Diseases.	Five years' average.	1928. 	Five years' average.	1928. (5)	Five years average.'	1928.	
Cholera Small-pox Plague Fevers Dysentery and Diarrhæa.		0.81 0.66 2.65 4.34 2.55	1·19 0·71 2·54 5·21 2·60	0.36 0.19 0.15 7.17 0.52	0.60 0.20 0.18 7.34 0.64	0.41 0.24 0.44 6.85 0.75	0.67 0.26 0.46 7.10 0.86
Respiratory diseases.		6.94	7.60	0.26	0.28	1.02	1.13
Injuries All other causes	•••	0.84 17.38	1.04 19.19	0·33 9·31	0·32 9·25	0°38 10°22	0.40
Fotal	•••	36.17	40.08	18.29	18.82	20.33	21.28

21. Cholera (Provincial). - The death rate from cholera is 0.67. This Statements compares with a five-yearly mean of 0.41 so that the year was a bad one for cholera and was in fact the worst since 1924 when the rate was 0.75. The unusual feature was the occurrence of two definite peaks in the epidemic, the higher one in April and the lower in December. high peak in the latter period is unusual.

II and VII.

22. Cholera (Rural).—The death rate for 1928 is 0.60 compared with Statement a five-yearly mean of 0.36. High rates were reported from the following districts :-

Akyab (2.54), Meiktila (2.18), Mandalay (1.62), Pyapôn (.99), Yamèthin (0'91), Kyaukpyu (0'86).

Tavoy and Mergui districts were as usual free. Shwebo District with a rate of (0.03) recorded the least incidence and Prome (0.06) came

Akyab.—The epidemic was the worst since 1919. It began in Maungdaw Township during the month of February and broke out as usual among immigrant coolies from the Chittagong District. Sporadic cases appeared in several villages and after the Phongyibyan festival at Paletwa from the 24th to 28th February the infection spread rapidly down stream and throughout the riverine towns and villages. During the last quarter of the year, Minbya, Myohaung and Pauktaw Townships were affected. The outbreak at Paletwa appeared during the Phongyibyan festival, when there was a gathering of about 3,000 people from all parts of the district. The Kaladan river is the main communication with Paletwa and it appears to have become contaminated.

Meiktila.—The epidemic started in May in the Mahlaing Township and continued on to the month of November. The Meiktila Township was the most heavily infected. Strenuous efforts were made by the District Public Health staff to deal with the epidemic and over 50,000 inoculations were made, which is a record for any district in Burma. Great credit reflects on Dr. DaCosta, District Health Officer, Dr. Ah Shoung, Assistant District Health Officer, and on Sub-Assistant Surgeons U Hla Pe and U Ba Myit, who conducted the campaign, and my thanks are also due to the Deputy Commissioner (Mr. C. J. Richards, I.C.S.) for his active support.

Mandalay.—Here the epidemic was the worst since 1915. The outbreak began in the month of October near the town of Madaya. The Shwetachaung creek, which is the source of water supply for the villagers in the area, became infected and all the villages along its banks suffered heavily. The epidemic reached its height in November and December.

In *Pyapon* cholera has latterly appeared every year. It usually occurs in the months of February, March, April and May, and stops as soon as the rainy reason is well established. The water supply is from rain-water tanks, surface wells and from "rivers which combine the functions of drinking water reservoirs, public baths, main drains and public highways."

Cholera reached the *Yamèthin* District from the Meiktila District. In October the disease assumed formidable proportions and became well established in a group of villages having two bazaars.

In Kyaukpyu, which was free from cholera in 1927, an outbreak occurred in Myebon village due to a Chittagonian who returned from Minbya with the disease. From there the disease spread to Theinbala and several other villages in the district. Considerable delay occurred in the reporting of cases. Oysters seem to have played a part in the spread of infection in the Kyaukpyu District.

In Kyauksè District an outbreak followed a Pagoda festival at Htonbo village, at which, owing to lack of notification to the District Health Officer, no sanitary arrangements were made.

In the *Hanthawaddy* District, cholera followed a Phongyibyan festival in Peingan village, while in the *Henzada* District the Ka-htein festival in Daunggyi village in October was responsible for a sudden increase of cholera in the Zalun Township.

In the Northern Shan States, isolated as well as grouped cases were reported all along the Burma Corporation Railway Locations. From here the disease spread on the main railway line, cases occurring at Manpwe and at one of the cooly gang camps of Tapalai which was very

heavily infected. Ooriya coolies were responsible for the extension of the disease to Hsipaw, where a bad epidemic broke out in the middle of the rains, and to other places on the line as far as Maymyo. The District Health Officer writes "The Ooriya comes from an endemic home of cholera in India and a fairly large proportion of them are carriers. Other conditions being equal and favourable, a little settlement of this class of Indians can always start fireworks of this nature. The remedy is difficult to suggest, but wholesale inoculation at the port of entry, though it would raise an outcry, would in my opinion be entirely justifiable; more so perhaps than vaccination."

23. Cholera (Urban).—The number of deaths 1,491 during the year gives a ratio of 1'19 as compared with a ratio of 0'99 for 1927. The figure is 0.38 above the five years' mean so that the past year was a bad year for cholera. The towns particularly affected were Pyu (11'83), Moulmeingyun (10.79), Pyapôn (7.40) and Magwe (6.14). In Pyu the water supply is from shallow wells. In Moulmeingyun the water supply is taken from the river. A grant has been given to the Municipality by the Public Health Board for the construction of a protected water supply. In Pyapôn a severe epidemic broke out in April following upon the annual Pagoda festival. In Magwe the water supply is obtained from the river and from shallow wells. A new scheme for a protected supply has been given out on contract. In Sagaing a severe outbreak of 72 cases with 57 deaths occurred almost exclusively amongst those using the river water. This town requires a full-time Health Officer. Cholera was also severe in most of the Delta towns. Henzada, which had 119 cases and 109 deaths, the water supply is from shallow wells and from the river. In Bassein, where the new tube well water has not yet been piped to the town, the epidemic was also severe. In Kyaiklat town the Circle Inspector of Police died of cholera and was kept in the house for 44 hours after death, during which time numerous friends and relatives visited the house. The Municipal President is of the opinion that the epidemic spread from this source.

24. Anti-Cholera Inoculations.—In Municipalities, a total of 47,030

Number of Provincial death rate on account of cholera. Year. anti-cholera inoculations. 1924 0.75 38,368 1925 13,965 0.18 • • • 1926 0.57 44,314 1927 0.42 62,467 1928 186,435 0.62

inoculations was carried out as compared with 24,750 in 1927. In rural areas the increase was much greater, a total of 139,405 having been done during the year as compared with 37,717 in 1927. Among the districts, Meiktila heads the list with 50,096, followed by Akyab with 13,249 inoculations.

The table in the margin shows the total number of inoculations against cholera carried out in the province year by year since this measure was introduced.

Statement VIB.

Statement VI-A.

25. Small-pox (Rural).—The 1928 rate was 0'20 and the five-yearly mean 0'19. The districts principally affected during the year were Toungoo (1'08), Akyab (0'86), Lower Chindwin (0'42), Thayetmyo (0'32), Sagaing (0'32), Yamèthin (0'30), Pegu (0'28), Myingyan (0'24), Shwebo (0'23) and Insein (0'21).

In the *Toungoo* District the epidemic was the worst since 1910 and continued throughout the year. One case of inoculation was detected in the month of September and the inoculator was prosecuted. Three village headmen were proceeded against for failure to report cases.

Akyab was severely affected, the last severe epidemic having been in 1922. Kyauktaw and Ponnagyun Townships were most affected. As usual, the great majority of the cases were adults. During the last quarter of the year, Myohaung Township became infected. It is hoped that vaccination under the 1928 Act of unprotected Chittagonian coolies entering Akyab Port will have some effect in reducing the incidence of small-pox throughout the district, but to be really effective vaccination stations will need to be opened on the land routes as well as the sea route.

In the Yamèthin District this year's epidemic was severe and the disease here also was prevalent throughout the year except the month of November. In the village of Okpho in the Yamèthin Township, although there were 27 attacks, no news was received until five weeks after the onset. A similar delay in reporting cases was noted throughout the district and the special feature of the epidemic was the reprehensible laxity in notifying early cases. Many small fines for failure to report were inflicted, but it is, to say the least, doubtful if these small fines have any serious deterrent action. In the Lewè Township, a woman was charged with the illegal practice of small-pox inoculation and was fined Rs. 15 which appears a very inadequate punishment.

In Henzada District, Burmese Se-Sayas started inoculation and the infection was distributed widely affecting many villages.

In the *Meiktila* and *Myingyan* Districts the vaccination campaign was seriously hampered by the fact that vaccination is not compulsory. These two districts have not yet accepted compulsory vaccination and it is obvious from the annual occurrence of widespread small-pox in them that an extension of the Act is most essential.

Tavoy District is generally free from small-pox, but during the year two cases occurred in the Peindaw village, Thayetchaung Township. With commendable promptitude, a segregation camp was erected about a mile from the village, the cases were isolated, and the villagers were all re-vaccinated, while intensive vaccination and revaccination was carried out in the neighbouring villages. The effectiveness of the measures adopted is demonstrated by the fact that the disease did not spread beyond the two original cases.

In the Myaungmya District. the District Health Officer remarks "Although vaccinal protection is good, it is not high enough by itself to protect the people from small-pox. I attribute the complete freedom we enjoyed from epidemics of small-pox to the absence of inoculators."

Statement VI-B.

- 26. Small-pox (Urban).—The urban fate for the current year as well as 1923 0.71 for the last five years is noted in the margin. Much 1924 0.57 the most severe outbreak during the year occurred 1925 1.10 in Pyawbwè where there were 84 attacks with 59 038 1926 The last outbreak appeared in this town 1927 0.56 in 1913 when there were 10 deaths. Considerable 1928 0.71 difficulty was experienced in dealing with the epidemic owing to concealment of cases. Eight individuals were fined for omission to report, the fines ranging from Rs. 3 to Rs. 5 which appears a very inadequate punishment for so serious an offence. Out of the 84 cases, 69 were among unvaccinated persons. It is obvious that the vaccination in this area is very unsatisfactory. A large proportion of these cases was among children up to 10 years of age. The District Health Officer states it was found that the vaccinator who works for both Yamèthin and Pyawbwè towns was not working satisfactorily and was letting off the parents on slight excuse and failing to trace them later on. The work of this vaccinator is being made the subject of an enquiry. Other towns fairly heavily infected were Allanmyo (4.01), Thayetmyo (2.79), Toungoo (2.74), Minbya (2.58), Shwedaung (2.53) and Ye-U (2.18).
- 27. Small-pox treated in Hospitals.—One thousand five hundred and four cases of small-pox were treated in Contagious Diseases Hospitals and Isolation Wards, 1,227 of these being in the Contagious Diseases Hospitals at Rangoon, Akyab and Moulmein. Of the total number treated, 951 showed old vaccination marks. Two hundred and nine deaths occurred among the 488 cases showing no vaccination marks giving a percentage of 42 83 while 84 deaths occurred among the 951 cases showing previous marks of vaccination giving a percentage of 8 83
- 28. Plague.—As usual, the Arakan Division remained free while the districts of Tavoy and Mergui were also free. The District Health Officer, Tavoy, fears that, when the railway extends to his district, the local immunity from plague may disappear. This immunity from plague in the Arakan Division and in the Mergui and Tavoy Districts we believe to be due to the rat flea distribution, figures so far as obtained indicating that there is a preponderance in these districts of Ixenopsylla astia, a poor transmitter of the disease as compared with xenopsylla cheopis which is the principal transmitter.

While the Mandalay rural area shows a death rate from plague of only 0.15 during the course of the year Mandalay town records the highrate

Statements II & XII.

of 5.25. The General Hospital in Mandalay became infected during the year, and the Local Government, on the representation of the Civil Surgeon, intervened and ordered the Municipal Committee to de-rat the hospital area.

Statement VI-A.

29. Plague (Rural).—The death rate for the year is 0'18, which is the highest figure recorded since 1923 when the rate was 0'30.

The districts principally affected were Meiktila (1.21), Myingyan (0.84), Sagaing (0.74) and Insein (0.54).

In Meiktila District, with the exception of 1920, plague has been present every year since its introduction, and may be said to have become endemic. Most of the cases occurred in the Meiktila Township, and the centre for spread appears to be the Meiktila town bazaar. Owing to the rapid development of the epidemic, three Sub-Assistant Surgeons and three Deputy Myoôks were posted to the district to conduct an inoculation campaign. Unfortunately there was much delay in the reporting of cases and also much concealment. For example, in Aungtha village, from which only rat mortality had been reported, the Assistant District Health Officer found on inspection that there had already been 20 deaths from plague, which had not been recorded in the death register, the cases having been concealed with the connivance of the headman.

In Myingyan the epidemic was the worst since 1918, only the Taungtha and Kyaukpadaung Townships remaining free.

In Sagaing District, more than half the deaths occurred in Sagaing Township. The epidemic Sub-Assistant Surgeon on special duty is of opinion that the disease broke out first among the coolies working on the Sagaing Bridge.

In the Insein District, the Taikkyi and Paukkan Townships have been as usual the worst affected. In the month of May the disease appeared in Hlègu; the source of infection being the very insanitary bazaar with its congested surrounding area. From Hlègu the infection spread to the neighbouring village of Tamangyi; other villages, which have not permanent markets but only a few paddy godowns, escaping completely.

The Magwe District was infected this year more heavily than in any previous year since 1910. Magwe Town itself was the centre of infection. In Kwingyi the early cases were reported by the headman as Mak-aw-lam.

In the Yamèthin, Minbu, Shwebo and Kyauksè Districts, plague was also severe during the year.

Statement VI-B.

30. Plague (Urban).—Three thousand one hundred and eighty-seven deaths are recorded giving a ratio of 2.54 compared with a quinquennial mean of 2.65. Only 14 towns were free from plague during the year. High rates are recorded from Minhla (11.49), a town which has had a

yearly visitation of this disease since 1914; from Kyaikto (11'44), which is a particularly insanitary municipality; from Pakôkku (10'61) the severest epidemic since 1910; from Nyaung-U (9'87); from Zigôn (9'54), and from Minbu (9'44).

Shwedaung. Yenangyaung, Nyaunglebin, Myingyan, Thônzè, Kyauksè, Ngathainggyaung, Magwe, Deaths. Ye-U, Mandalay and Prome were also heavily 162 1925 infected. In Wakema it is recorded that the rats 382 1926 278 1927 in most houses live in the roofs during day-time 782 1928 and the people object to their being driven out. In Mandalay the figures for the last few years have been noted in the margin.

This town is in my opinion the dirtiest of any of the large towns in Burma.

Plague in Burma is pre-eminently a disease of towns, associated with such fundamental matters as neglect of rubbish removal and general cleanliness; and with careless uncontrolled storage of grain in premises quite unsuited for the purpose. All wholesale grain dealers should be obliged by bye-laws to store grain in properly constructed rat-free godowns. The general state of dirt prevailing throughout most of our Burmese towns is a matter to which most Municipal Committees pay little attention. Education undoubtedly in time will have the effect in raising the standard of house and street cleanliness throughout the country, but this effect through education alone will be slow in coming, and it appears that if we are to hope to check the course of the present great plague epidemic, we must take stronger central action than we have done in the past to stimulate Local Bodies to a sense of their responsibility. We are now at a stage in Burma similar to that obtaining in England about 1,848 when, to quote from Sir Malcolm Morris, "The current conception of a local authority was that of a body with power to do as it pleased, even if it were pleased to do foolish things, or to do nothing." At present the most noticeable feature in Municipalities throughout the country is local inertia coupled with resentment towards all attempts at central control. The existing powers of central control are insufficient, and similar steps to those taken in England to secure it will inevitably have to be taken here.

Regarding plague in Meiktila town, the District Health Officer writes "From time to time it has been pointed out to the Municipal authorities that the conditions in and around the bazaar are most favourable for the breeding of rats and that unless building bye-laws are introduced it will not be possible to prevent the recurrence of the epidemic every year. The town is a focus of infection in the district and epidemics in the district can be traced to the Meiktila bazaar." On this remark, the Municipal President comments "I do not agree." One wonders upon what grounds his disagreement is based and what

value it has as a contribution to the plague problem in Meiktila town and district.

31. Anti-Plague Inoculation.—The following table shows the urban rural, and provincial figures, for plague death-rate, and the number of inoculations carried out during the year:—

			Urt	oan.	Rur	al.	Provincial	
	Year.		Death raț e .	Number of inoculations.	Death rate.	Number of inoculations.	Death rate.	Number of inoculations.
	(1)		(2)	(3)	(4)	(5)	(6)	(7)
1927 1928	٠	•••	2·00 2·54	60,235 47,035	0·11 0·18	42,624 54,107	0 [.] 32 0 [.] 46	102,859 101,142

Meiktila District returns the highest number of inoculations, namely, 11,567. In this district there has been excellent co-operation between District Officers and the Public Health staff. The District Health Officer and the Assistant District Health Officer deserve to be congratulated on the results. I also desire to thank the Deputy Commissioner for his energetic help. In this district the Wunthanu element has been strong for a number of years, and has consistently opposed public health progress, and by spreading false information, has hampered inoculation both against plague and cholera. The following extract from the diary of the late Dr. U Lay Gyi, Epidemic Sub-Assistant Surgeon on plague duty in the Meiktila District, is of interest. He describes his visit to a plague infected village. "4th February 1928: Leiklat-visited the village with the headman of Thedaw village-tract and found that all the people had evacuated the village and lodged in small palm-leaf huts out in the fields. As soon as they saw us coming towards their huts, all the inmates with the children fled towards the jungle as if we were their enemies." The people refused anti-plague inoculation.

Statements II and IX.

32. Fevers (Provincial).—The term "fevers" as used in our statistical reports covers a multitude of conditions which it is impossible for the unlearned village headmen to differentiate. It does not, however, include cholera, plague and small-pox, which it is expected the headman should be able to recognize as such. It is interesting to contrast in this connection the death rate from "fevers" in the urban and rural areas, which in the case of the rural areas was 7.34 and in urban areas 5.21, with the recorded death rate from "respiratory diseases" which is returned from rural areas as 0.28 and from urban areas as 7.60. It will be seen that the recorded death rate from respiratory diseases in urban areas is 27 times as great as that from rural areas, indicating that the average village headman tends to report many deaths from respiratory diseases under the heading of fevers whereas in towns, where verification of the cause of deaths is checked by a medical man, deaths from respiratory diseases are returned under their correct heading.

The urban death rate was 5'21 and the rural death rate 7'34.

Rural.—Particularly high rates were returned from the following eight districts—Tavoy (18'43), Kyauksè (13'71), Thayetmyo (12'78), Minbu (12'16), Prome (12'33), Akyab (12'22), Pakôkku (11'37) and Mergui (10°32).

Statement

Thayetmyo.—During the year malaria in a very virulent form, almost epidemic in character was experienced throughout the district, and the District Health Officer attributes this to the excessively heavy rainfall interspersed with fairly long periods of dry weather producing conditions congenial to mosquito breeding.

In Minbu, a notoriously malarious district, a malaria survey of the Pwinbyu and Mezali areas was carried out during the course of the year by Dr. Feegrade.

Akyab records a steadily high rate since 1912. The deaths classified under fevers are probably chiefly due to malaria which is prevalent throughout the district. On account of its widespread character and the fact that infection occurs in early youth, the District Health Officer holds that villagers become so used to it that it is looked upon as a normal condition. The seriousness of chronic malaria and the absence of proper treatment has not yet been realized.

Mergui.—Malaria occurred in epidemic form during the year and an Epidemic Sub-Assistant Surgeon was deputed for three months to deal with the outbreak which was most severe in the Palaw Township. It was observed that some of the village headmen though required to stock cinchona febrigue tablets for sale did not do so.

Urban.-In towns the fevers are classified under their several Statements headings. We are therefore able to give more accurate statistics. the 6,532 deaths under the group heading fevers in towns, 2,559 were due to malaria, 513 to enteric, 19 to cerebro-spinal meningitis, 207 to measles, 1 to acute poliomyelitis, 140 to influenza and the very large figure of 3,093 to 'other fevers.'

VIB and VIB (a).

Malaria.—The death rate from malaria in towns was 2'04 as opposed to 1'90 in 1927 and a five-yearly mean of 1'85. Exceptionally high rates were returned from Shwegyin (12'50), Pyawbwe (10'63), Myinmu (9.65), Kyaikto (8.93), Taungdwingyi (8.56) and Kyaiklat (7.81).

Mandalay.—Deaths recorded as due to malaria are tending to increase year by year in this town. In 1926 there were 398 deaths VIB (a). recorded from malaria, in 1927 432 and in 1928 514. A study of the incidence of malaria in the several 'quarters of the town shows that the mortality is particularly high in the outskirts which are in proximity to paddy fields, and in the low-lying quarters of the town where the ground remains swampy for several months in the year. Mandalay is unfortunate in being surrounded by very malarious country and this year it had the added disadvantage of an exceptionally heavy rainfall. Unfortunately the surface drainage system of the town has been allowed

Statement

to silt up through neglect, and this is probably an important factor in the recent increase of the disease.

Statement VIB (a).

Enteric Fever.—High rates for enteric fever were recorded from Kyaiklat (3'36), Pyapôn (3'21), Wakèma (1'30), Pyinmana (1'14) and Mandalay (1'07). Unfortunately in many of these towns the diagnosis of the great majority of cases remained unconfirmed by Widal's reaction or by blood culture. In Mandalay, where the cases have been more accurately diagnosed, the disease is endemic and increasing. It is interesting to note that whereas during the last few years the deaths from enteric have shown a tendency to vary inversely as the deaths from malaria, during 1928 there is a pronounced increase under both headings. Endemic enteric in Mandalay should be attributed to the defective system of nightsoil removal and to the poor water supply.

Opening Balance ... 150,200 tablets of 4 grains each.

Quantity manufactured during the year.

Total ... 3,801,800 tablets of 4 grains each.

Issues to Treasury Officers and others.

Closing Balance ... 175,600

Treasuries sold during the year 3,370,800 tablets as against 4,101,100 in 1927, the greater part of the decrease this year being in the districts of Southern Shan States, Northern Shan States, Myitkyina, Akyab and Bassein.

Altogether 973,600 tablets were distributed free in 14 districts as against 814,400 tablets in 1927. Free issues on a large scale were given in the Katha, Kyauksè, Chin Hills and Myitkyina Districts. The consumption of quinine per-head of population varied considerably from district to district being greatest in Bhamo, where in all probability a certain amount found its way across the frontier to China.

The fever mortality in those districts showing the highest death-rate from this cause together with the quinine consumed per head of population is indicated in the table immediately below:—

D	istrict.		Fever Death-	Quinine consumed.		
District.			rate.	1927.	1928.	
Tavoy	•••		17.90	1.81	2:25	
Kyauksè	•••		13.30	0.20	4.19	
Thayetmyo			12.35	1.08	0.92	
Minbu			12.22	1.08	0.44	
Akyab	• • •		11.72	1.79	1.18	
Mergui	• • •		11.68	4.02	5.22	
Prome	• • •		11.31	1.15	0.70	
Pakôkku	•••		11.13	0.32	0.22	
		1				

During the year by order of the Local Government the wholesale price of a packet of cinchona febrifuge containing 200 four-grain tablets was raised from Re. 1-2-0 to Re. 1-4-0. The retail price to the public of the "treatments" containing 20 tablets each remains fixed at Rs. 0-2-6 so that the loss falls upon the middleman dealer whose commission is reduced from 6 annas to 4 annas per packet. Further minor modifications have also been made in the rules for the sale of quinine authorising the Director of Public Health to issue cinchona febrifuge tablets to Government servants at the wholesale rate of Re. 1-4-0 per packet and allowing the license to retail vendors, formerly issued on an annual tenure, to remain valid until withdrawn or cancelled by Government.

Cholera Tablets.—Twenty-two thousand five hundred cholera tablets, each containing 2 gr. Potas Permanganate, were issued during the year in two districts only, Myaungmya (20,000) and Amherst (2,500).

Eye Lotion Tablets.—Thirty-seven thousand six hundred and eighty of these tablets, which contained each 3 grains boric acid and $1\frac{1}{2}$ grains zinc sulphate were issued during the year as compared with 15,000 in 1927.

34. Dysentery and Diarrhaa.—The provincial rate for the year was 0.86 as compared with a five-yearly mean of 0.75.

Statements II, VIA, VIB & X.

Rural.—The death rate was 0.64 compared with 0.52 for the fiveyearly average. Tavoy (1.69), Prome (1.28), Meiktila (1.08), Akyab (1.00), Bassein (0.98), Pakôkku (0.98), Thaton (0.92) and Shwebo (0.90) returned the highest rates.

Urban.—The figure for 1928 was 2'60 compared with a five-yearly mean of 2.55. Highest death-rates were returned from Kyaikto (10.32), Pyapôn (7.15), Insein (5.87), Kyaiklat (5.64) and Moulmeingyun (5.56).

35. Respiratory Diseases.—The death rate of 1'13 compares with Statements 1'02 for the five-yearly period and is the highest figure since 1920. most districts the male death rate in these diseases is considerably (a) & XI. higher than the female.

In VIB, VIB

Rural.—This year's figure of 0.28 compares with a figure of 0.26 for the five-yearly mean. Amherst, Akyab and Tavoy returned much the highest death rates from respiratory diseases.

Tuberculosis is not as yet a disease of importance in the rural areas of Burma.

Urban.—In marked contrast to the low death rates from respiratory diseases recorded in the rural areas, we have very high death rates returned by towns under the heading "Respiratory Diseases", deaths from which group are only exceeded by the omnium gatherum of undiagnosed cases known as 'all other causes'. The 1928 death rate for respiratory diseases was 7:60 compared with a five-yearly mean of 6:94. It will be noted that the death rate in urban areas is nearly 27 times that prevailing in rural areas. The figure for 1928 is the highest on record. There is reason for believing that deaths from respiratory diseases are on the increase in the larger towns of Burma. In towns we are able to divide up the respiratory group into several separate diseases and out of the 9,532 deaths recorded in 1928 in this group 2,060 or 21:61 per cent. were due to Pulmonary Tuberculosis, 3,755 (39:39 per cent.) to Pneumonia, and 3,717 (38:99 per cent.) to "other respiratory diseases." The death rate from Pulmonary Tuberculosis and Pneumonia has been increasing for some years past and this year's rates under each heading are the highest on record.

Myaungmya Town.—Diseases of the respiratory system are alarmingly on the increase. More than one-third of the total death rate this year was recorded as due to respiratory affections. The District Health Officer considers that much of this mortality is due to tuberculosis complicated by pneumonia, and points out that most of the villages are flooded during a considerable part of the year.

Moulmeingyun.—Sixty-two deaths out of a total of 341 were due to respiratory diseases, 33 being from tuberculosis of the lungs and 23 from pneumonia.

In *Thaton* and *Ma-ubin* also, the Health Officers are of opinion that tuberculosis is increasing and in Thatôn the need is stressed for improved building bye-laws.

Statement VIB (a).

- 36. Beri-beri.—The disease is registered as a separate entity only in towns; hence it is possible to give only the urban death rate, which is 0.35 compared with a five-yearly mean of 0.19. The rather marked increase is in my opinion largely due to improved diagnosis. The disease occurred this year both in Mawlaik and Toungoo towns. Among rural areas, deaths occurred in Pyapôn and Akyab districts. In Mergui it is said to be prevalent among the coolies working in the Mines and in the Rubber Estates. In the Upper Chindwin, the District Health Officer remarks that the disease is severe and thinks that from year to year its limits are spreading. An outbreak of a somewhat explosive nature occurred in some of the villages of the Amherst District in September and October, and an Epidemic Sub-Assistant Surgeon was placed on special duty. A pamphlet on beri-beri was prepared and issued to the public through the Publicity Bureau towards the end of the year.
- 37. Yaws,—Epidemic Sub-Assistant Surgeon Kan Mra Thoo was employed on the investigation of Yaws in the Katha District during six months of the year. Thirty-six villages out of 53 were found to be infected. The disease is widespread in the Indaw, Katha and Tigyaing

Townships. The majority of the cases found were chronic, the commonest site of the lesion being the soles of the feet. During the rainy season, the plantar lesions become exacerbated and owing to the painful cracks and fissures which develop patients are unable to walk. General skin eruptions were seen only in two and the disease apparently has a predilection for the soles of the feet and the lower leg. Juxta-articular nodules over hips and knees were frequently seen and the characteristic raspberry lesions were frequent in children and observed sometimes growing out of a fissure on the soles of the feet. Sub-Assistant Surgeon Kan Mra Thoo notes the low level of personal cleanliness in the people among whom Yaws is endemic and states that the local belief is that the disease is spread by biting insects. He suggests that leeches may play a part in the spread of the disease, a theory which is supported by the frequent infection of the feet and the lower part of the legs. District Health Officer, Mergui, notes that special attention has been directed towards the treatment of Yaws in Victoria Point during the three years following upon the survey carried out there by the Public Health Department, and that the people have begun to appreciate the treatment, and to realize that it is greatly superior to the methods employed by Se Sayas.

38. Leprosy.—The urban death rate was 0'17. Minbu, Nyaung-U, Pakôkku, Taungdwingyi and Myingyan record the highest death rate from this disease. In the Upper Chindwin a list of lepers has been prepared by the Deputy Commissioner, but requires verification by the District Health Officer. This is an important step and it is to be hoped that all District Health Officers will in course of time open registers of known lepers within their districts.

Lepers entering by sea.—Ten cases of leprosy arriving in the Port of Rangoon by sea were detected at the Port Health Station, Rangoon, and all were allowed to proceed to their destination.

39. Venereal Diseases.—No statistics other than attendance at hospitals exist in Burma by which to gauge the prevalence of these diseases, and the country is certainly not prepared for compulsory notification, nor will be for many years to come. These diseases are more liable to concealment than any other, and owing to the mode of spread they have been the last of the large groups of diseases to be dealt with even in highly developed countries by modern public health methods. To hope for any marked diminution in their incidence in Burma before we have built up a basic Public Health Service or begun to influence the habits of the people to any appreciable extent in the direction of improved environmental hygiene is useless. The report of the Delegation of the British Social Hygiene Council has now been published but it is inadvisable to pin too much faith to that Delegation being able to prescribe a panacea for these intractable social diseases.

Statement VIB (a).

SECTION IX.

CIVIL SANITARY WORKS.

- 40. Expenditure on Civil Sanitary Works.—Out of a total sum of Rs. 82,84,542 spent during the year, Rs. 68,39,554 were spent in towns and Rs. 14,44,998 in rural areas. The provincial percentage of total expenditure on Civil Sanitary Works to total income was 17'24, the percentage in towns was 22'89 and in districts 7'95. Of the total provincial income from all sources 4'67 per cent was spent on water works, 1'23 per cent. on drainage and 5'74 per cent on conservancy. More detailed information on Civil Sanitary Works is given in Statement A.
- 41. Provincial Public Health Board,—Eighteen projects were considered by the Board during the year compared with 26 in 1927. The Projects Sub-Committee held four meetings and the General Board three meetings. Grants sanctioned totalled Rs. 2,37,315 compared with Rs. 3,81,397 in the year 1927. A recommendation was made by the Board to the Local Government for the preparation of a geological survey of Rangoon and its environs in connection with the Rangoon water supply scheme. This was carried out and the report was received after the close of the year. The detailed report of the Board is published as Appendix B.
- 42. Public Water Supplies:—Bassein.—A piped water supply has not yet been completed for this town. The Committee has been advised to proceed with the proposed pipe distribution system from the Kanthonzin tube well. A grant of Rs. 10,000 was received by this Committee from the Public Health Board in 1927 in order to dig ten surface wells. The Commissioner writes. "The seven wells which have been dug appear to have been dug in unsuitable places, and the water gives out when it is most wanted. Only seven wells were actually dug and the Committee are now asking to be exempted from the obligation of digging three more wells." The money expended upon these wells would appear to have been wasted.

In Meiktila, where the need for a piped water supply was pointed out to the Municipality, the Committee is not in favour of the scheme because it will mean increased taxation.

Regarding Shwebo, where a piped supply is under construction, the Commissioner remarks "The water supply scheme is beyond the resources of the Committee, which it should not have been allowed to touch without adequate staff or supervision. The President has given me a verbal undertaking to get the Committee to ask the Water and Sewerage Engineer to take over the work, but no application from the Committee has reached me yet."

In Tavoy, a town of 27,480 population, the drinking water supply is still exclusively from shallow wells. There is reason to believe that a good deal of enteric fever passes undiagnosed in this town. The Committee has hitherto shown little interest in the health of the people.

In Akyab the existing pipe distribution system has become old and defective, and a scheme is under consideration for renewing the pipes.

In Tharrawaddy there is an old tube well from which water is supplied to some parts of the town. Most of the hydrants are broken down. Even from those still working, water is supplied for only one hour in the morning and one hour in the evening. An improved scheme is under consideration.

Kyaiklat water supply is again giving trouble owing to breakdown of the distribution system. Although Government offered a free grant of Rs. 35,000 and a loan of Rs. 35,000, the Committee was unwilling on the plea of poverty to impose the additional water tax which would be required. The Deputy Commissioner points out that the Committee's usual dirge about heavy taxation is all nonsense as the Committee's taxation incidence is only Rs. 3-3-10 compared with an average of Rs. 3-14-2 for the whole province.

At Nyaunglebin a piped water supply scheme is nearing completion, while the Pyapôn scheme is making rapid progress. Other schemes are in progress at Magwè and Pyawbwé.

The Myingyan water supply from four artesian wells was opened on the 4th September 1928. In this town a local Chettiar Mr. O.C.O. Alagappa is reported to have supplied three stand pipes and eight water tanks for animals in various parts of the town at his own cost. A correspondent in the local press writes in this connection. "According to Buddhist faith, ten great benefits are believed to be derived from the offering of water." One wonders why wealthy Buddhists do not come forward to obtain these benefits by financing the supply of pure water in their towns

In Mandalay, where the provision of a good water supply has been the subject of long and anxious consideration on the part of Government for a number of years, there is an existing system of tube-well supply which consists of eight wells tested at the time of their construction to be capable of supplying nearly $2\frac{1}{2}$ million gallons of water per day. At the present moment, only three of these wells are functioning and the condition of the pumping plants, storage tanks, piping and distribution system, shows clear signs of serious and long standing neglect. The municipality has had no qualified engineer for some considerable time.

The wastage of water in public water supplies throughout the country is becoming a serious factor, particularly so in Rangoon, where

त्कर्भ ,

the necessity for controlling waste is very important. Rangoon Corporation might borrow a leaf from Hongkong, a town of approximately similar population and having a similar climate. The following extract is taken from a Hongkong newspaper, dated the 29th October 1928:—

"Sergeant Henderson charged a coolie, before Mr. R. E. Lindsell this morning, for wasting water at a fountain in Mallory Street. According to the Sergeant, while on beat at 1-30 this morning, he saw the defendant fill a kerosine tin with water at the fountain. Then, without turning off the water, defendant crossed the street with the filled tin and returned with an empty one. For about 45 seconds the water ran to waste before defendant returned. A fine of \$3 or in default six days' hard labour was imposed."

Metering of all house connections and careful prevention of waste at public stand pipes would go far towards solving the immediate water shortage question in Rangoon.

43. Conservancy.—There is an increasing tendency in municipalities in Burma to change over from bullock cart to motor car conservancy During the year, Sandoway, Insein, Thatôn, Pyinmana and Taunggyi adopted the motor removal system for rubbish. Yamèthin and Kalaw adopted it for both rubbish and excreta, while Mergui adopted it for excreta only. Altogether 25 municipalities now remove refuse by motor car and 9 remove excreta in the same manner. Pegu, Myaungmya, Ma-ubin and Danubyu are considering proposals to adopt the motor system.

A small but dwindling number of municipalities still have their conservancy and rubbish removal carried out for them on the contract system. I have seen no instance of this system working well and free from abuse in any municipality in Burma. In Pyapôn, the District Health Officer remarks "the state of night conservancy of the main town however continues to be in the same deplorable condition as mentioned in my previous reports" on which the Deputy Commissioner comments: "The Committee is certainly neglecting a primary duty".

The Mandalay conservancy system is full of defects and must play an important part in the dissemination of enteric which has become widely prevalent and endemic in that town. The Health Officer states "it is proposed now that the wooden buckets be done away with and motor transport be adopted."

44. Anti-Malarial Operations.—Two surveys were carried out during the year, one at Mezali in the Minbu District by Dr. Feegrade assisted by Epidemic Sub-Assistant Surgeon U Ba Shin (II), and the second at Shwenyaung, the new railway terminus in the Southern Shan States, by Epidemic Sub-Assistant Surgeon U Tin. The reports of these two surveys are still under consideration, but it is hoped to publish them in due course. Both were shown to be highly malarious.

In connection with the Malaria Survey of Hsipaw Town carried out in 1926, Epidemic Sub-Assistant Surgeon S. C. Banerjee was placed on special duty at Hsipaw for about half the year to carry out anti-malaria Under his supervision, the town was cleared of much of its scrub jungle: the Payagyi tank was drained; the Yehaw tank was weeded, and the water level raised and lowered at weekly intervals; swamps in the railway compound and its vicinity were filled in and other swampy areas drained; while the banks of many of the canals passing through the town were straightened out, and other areas which could not be drained The expenses of the work were met by the Hsipaw State were oiled. and it is hoped that they State will continue its anti-malaria efforts which it has so energetically begun. Difficulties have, of course, been met and these can only be overcome by time and patience, but the work already done has had an excellent educative effect. As an instance of one of the difficulties experienced, the Superintendent, Northern Shan States, remarks: "I may mention that, when we were congratulating ourselves on having eliminated mosquitoes from certain streams, they promptly appeared in the rice fields, where previously they did not exist."

In Akyab, anti-malaria work is steadily proceeding in a small way since funds for more extensive work are not obtainable. Three big tanks and various excavations have been filled up and the sources of the Jallia Creek in the Pelegaung quarter are being reclaimed. All pools and tanks breeding anopheles have been regularly treated during the rains with crude oil.

In Kyaukpyu little has been done this year pending the appointment of a committee to advise the Local Government on anti-malaria measures in this fever-ridden spot.

Bhamo is also waiting for a meeting of experts on the spot to decide the permanent policy to be adopted there. In Mawlaik and Lashio, efforts have been made to follow the lines suggested by the Mosquito Survey Mawlaik is a very difficult problem to deal with, but the position in Lashio is more hopeful and an Anti-Malaria Sub-Committee formed under the Presidentship of Mr. G. E. Harvey, I.C.S., is energetically tackling the question.

Dr. Feegrade inspected the Public Works Department Nyaunggyat camp in the Kyauksè District in the months of April and May and found the camp at that period of the year free from transmitting mosquitoes.

Dr. Feegrade held charge of the Provincial Malaria Bureau throughout the year assisted by Epidemic Sub-Assistant Surgeon U Tin.

45. Port Health Department, Rangoon.—The most important feature in the working of the Port Health Department during the year was the introduction of re-vaccination under the Vaccination Amendment Act of 1928. Under this Act, which came into force on the 1st August, 553 vessels

were inspected and all passengers coming under the provisions of the Act were re-vaccinated. The actual number of operations performed during the year totalled 138,858 compared with a total of 42,353 for the preceding year.

Three hundred and fifty-three in-coming vessels were disinfected during the year while ten out-going vessels were fumigated. The usual inspection of crews and passengers of both in-coming and out-going vessels was carried out and their baggage and effects disinfected where necessary.

In addition to this routine work, a number of candidates of the Port Commissioners' establishment were medically examined and as usual the Port Commissioners' Dispensary was managed by the Port Health Officer and his staff, the average daily attendance being 148.

Early in the year, a rat-flea survey of the port area was begun by the staff of the Harcourt Butler Institute of Public Health in co-operation with the Port Health Department and assisted financially by the Indian Research Fund Association.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

46. Director of Public Health and Assistant Directors of Public Health.—At the beginning of the year, Lieutenant-Colonel Bisset, I.M.S., held charge of the Public Health Department, Lieutenant-Colonel Jolly was first Assistant Director and Major Bilderbeck was second Assistant Director. Lieutenant-Colonel Jolly proceeded on leave on the 14th March 1928; and Dr. Anklesaria officiated, Lieutenant-Colonel Jolly returned from leave on the 20th November 1928 and on Lieutenant-Colonel Bisset proceeding on long leave on the 7th November 1928 officiated as Director of Public Health, having Major Bilderbeck and Dr. Anklesaria as Assistant Directors.

Inspections of the following places were carried out during the year by the Director and Assistant Directors:—

Akyab, Sandoway, Bassein, Moulmein, Insein, Shwèbo, Katha, Bahmo, Myitngè, Pegu, Shwèdaung, Prome, Paungdè, Meiktila, Toungoo, Ma-ubin, Kyaiklat, Thônzè, Letpadan, Zigôn, Pyapôn, Tharrawaddy, Thatôn, Kyaikto, Nyaunglèbin and Sagaing.

In November 1928, Dr. Anklesaria investigated an enteric epidemic in Mandalay Town. In December 1928, Lieutenant-Colonel Jolly attended the All-India Conference of Research Workers at Calcutta.

47. Work of the Hygiene Publicity Bureau.—This Bureau is a branch of the Public Health Department. Dr. Shwe Ge assumed charge on

the 13th January relieving Dr. San Hla Aung who proceeded on leave. A great deal of work was carried out during the year and the Bureau, which has now established itself as a successful concern, has carried out active programme. The Hygiene Publicity Officer visited 19 towns and a number of villages during the year, carrying out in each place visited a series of talks to local people, lantern lectures and cinema demonstrations. Largely as a result of his efforts, health societies were formed at Tavoy, Mergui, Magwè, Thayetmyo, Thatôn and Taikkyi, and moribund societies were revived at Myaungmya, Ma-ubin, Pyapôn and Pegu. Nine schools were also visited for health propaganda purposes. The Department's locally prepared cinema film entitled "The Village Well" was shown on 26 occasions during the year and has been much appreciated. It has been decided to obtain another reprint of this film. The Hygiene Publicity Officer also arranged with the Editor of the Headman's Gazette for the publication weekly of an article dealing with health topics. Three new pamphlets on (1) The Care of Children, (2) Tonsiis and Adenoids, and (3) Health Education for Schools, were prepared by the Bureau during the year and added to the stock of propaganda materials. Altogether well over a million copies of the Bureau's publications were distributed to the public throughout the country and 2,346,000 health pamphlets suitable for children have been supplied to the Director of Public Instruction for use in schools in the Province. Some of the District Health Officers carried out useful propaganda work during the year. I would specially mention the District Health Officer, Tharrawaddy, the District Health Officer, Northern Shan States, and the District Health Officer, Myitkyina. In addition to these officers, the Health Officer, Maymyo and the Rev. J. R. Boyles of the Methodist Mission Church gave valuable assistance by carrying out health propaganda work. Mention must be made also of the great deal of propaganda work that was carried out by the Epidemic Sub-Assistant Surgeons of the Department, all of whom have been supplied with stocks of the Bureau's publication and who are required to carry out health publicity work as part of their duties. Several of these officers gave valuable assistance to the Department, but others have not done as much as they might and it is hoped that there will be a great increase in this type of work done by these Epidemic Sub-Assistant Surgeons during the next year. A summary of the Bureau's publications during the year is given as Appendix E. I wish to express my thanks to Dr. U Shwè Gè for the great interest he has taken in the work of the Bureau during the year.

48. Medical Officer of Fairs and Festivals.—Dr. Ba Kin, B.A., M.B. Ch.B., D.P.H., continued as the Medical Officer of Fairs and Festivals, His temporary appointment will terminate by February 1929 when a complete report of his work will be available for review.

49. Assistant District Health Officers were employed during the year in the Akyab, Prome, Bassein, Amherst, and Meiktila Districts. Dr. U Tha Gyaw proceeded to Calcutta on the 4th October to attend the D.P.H. Course there. Dr. Saw Kyaw Zit attended the Government of India malaria training class during the year. In the Akyab District Dr. U Tha Gyaw performed over 4,100 cholera inoculations during a severe epidemic which occurred there early in the year, while Dr. Ah Shoung in the Meiktila District carried out 4,300 plague and 15,300 cholera inoculations and deserves to be congratulated on an excellent year's work. The Assistant District Health Officers also carried out a great deal of valuable health publicity work.

50. Scheme for Urban and Rural Health Officers.—In pursuance of Local Government's Department of Public Health letter No. 29S25, dated the 20th January 1925, the Henzada Municipality appointed during the year a Health Officer on half-pay grant system with effect from the 1st May 1928. Unfortunately the officer became ill, went on leave from 12th July 1928 and eventually resigned his appointment from 1st September 1928. Thus at the end of the year only Akyab, Pegu and Prome Municipalities had full-time Health Officers on the half-pay grant system.

The schemes for the appointment of five Assistant Surgeons and 20 Sub-Assistant Surgeons in rural areas sanctioned in 1924 and for the appointment in urban areas of four Health Officers on the half-pay grant system sanctioned in 1925, were experimental. Subsequently the question of a full-time Public Health Service for both urban and rural areas was taken uptin hand. Local Government's resolution No. 243S27, dated the 6th February 1928, sanctioned the introduction of the halfpay grant system to both rural and urban areas. Under the resolution each municipality having over 100,000 inhabitants should have one first class Health Officer and one second class Health Officer, while those having a population of 20,000 to 100,000 should have one first class Health Officer. Smaller municipalities having a population up to 20,000 may appoint second class Health Officers while still smaller municipalities are permitted to appoint part-time Health Officers. Each District Council should have a first class Health Officer. First class Health Officers must hold the Diploma in Public Health of an approved school, Second class Health Officers should be Sub-Assistant Surgeons who have received special training under the Director of Public Health and passed the prescribed examination.

On receipt of the Local Government's Resolution, a circular letter was issued to Town Committees, Municipalities and District Councils requesting them to intimate to this office as to whether they were prepared

to take advantage of the concession. Out of 28 District Councils only five accepted the scheme while five Municipal Committees and one Town Committee agreed to come in. In view of the unsatisfactory reception of this scheme by District Councils, proposals for limiting it to urban areas and for the appointment in rural areas of full-time Health Officers on a provincial basis are now under the consideration of the Local Government.

51. Epidemic Sub-Assistant Surgeons.—The sanctioned number of these remained at 20, but it was found necessary during the year to employ 8 additional ones. The work done by these officers is so important and their usefulness is becoming so generally recognised that it has been found impossible to meet the demands for their services. Application has been made to Government for an increase of their number to 50 which would provide one per district and a reserve of ten. addition to their main work of combating epidemics, these Sub-Assistant Surgeons are employed between epidemics in general district health work. When one remembers that there is not a single district in Burma which has a full-time Health Officer, and that many of the Civil Surgeons officiating as Health Officers are prevented by pressure of their medical work from touring through the districts, it is readily understandable why these Epidemic Sub-Assistant Surgeons are in sogreat demand. Owing to the call for their services for epidemic duty during the year, as many as 28 have been employed at a time, the additional men over the sanctioned strength of 20 being obtained through the Inspector-General of Civil Hospitals on a temporary basis. There is a proposal now before Government to give the Director of Public Health his own cadre of these men. The present arrangement is extremely wasteful. Sub-Assistant Surgeons from the Medical Department are deputed to the Public Health Department, where they are trained in public health work, and utilised in connection with epidemic and other health duties. At the end of three years, they elect whether to remain permanently with the Public Health Department or to revert to the Medical Department. Hitherto nearly all have elected to revert, and so long as they are not recruited specially for the Public Health Department, this wasteful system is bound to continue. During the year a large number of inoculations has been carried out by these Sub-Assistant Surgeons. The figures for the three years 1926, 1927 and 1928 are given in the margin and show a very satisfactory increase.

.Years.	Cholera Ino c ulation.	Plague Inoculation.
1926	13,370	4,290
1927	18,230	8,260
1928	57,220	12,590

17,820 birth and death entries and 3,600 cases of vaccination have also been verified.

In addition to epidemic and general sanitary duty, several were employed on special work. U Aung Than, on return from malaria training in India, was posted for beri-beri duty to the Amherst District, Mr. K. Mra Thoo was on Yaws duty in the Katha District and Mr. S. C. Banerjee and U Ohn Pe were on malaria duty at Hsipaw and in Yamèthin District respectively. The work of oiling and trimming the margin of the Imperial Lakes of Bhamo for anti-malarial purposes was undertaken by U Aung Tha Hla while U Ba Shin (II) assisted Dr. Feegrade in a malaria survey in the Minbu District, and U Tin took charge of an important malaria survey of the Shwenyaung area in the Southern Shan States. U Ba Myit, U Hla Pe, Kan Ah Yoo, Maung Thin and U Aung Tha Hla have done particularly good work in connection with inoculation for plague and cholera.

I record with regret the death on the 20th October of Sub-Assistant Surgeon U Lay Gyi, a keen and promising student, while under training at the Harcourt Butler Institute.

52. Public Health Inspectors' Training Class.—Thirty-four students were admitted and 24 passed the final examination. There are signs that the class is becoming more popular, and it is hoped to train a large number of students during the coming year.

Public Health Inspectors in Urban and Rural Areas.—The number of Public Health Inspectors employed during the year was 119. Of these 35 were employed in the Corporation of Rangoon, 23 in rural areas under District Councils, 1 in Myitkyina District and 60 under the muffusil Municipal and Town Committees. Only 14 out of the 28 districts to which the Burma Rural Self-Government Act was extended employed Public Health Inspectors. Among those who have done good work mention may be made of Mr. K. A. Nathan in the Yamèthin District who according to the District Health Officer was the main source of strength in all public health activities, of late P. C. Muthuvelu Pillai who ably served the Henzada Municipality and of late C. J. Gnanapathy a promising young man who served the Municipal Committee, Prome. The first two were recipients of gold watches from Government in recognition of their services.

53. Inspection of Plans of Government Buildings.—During the year inspections by officers of this department were made of the offices of the District Magistrate, Rangoon, and the Collector of Rangoon. These inspections revealed serious sanitary defects. In the former case the building has been condemned as unfit for further use as a public

office and it is hoped that similar action will be taken to deal with the latter.

These instances indicate the advisability of periodical inspection of public buildings from the health point of view.

In regard to plans for the erection of new Government buildings, it has now been agreed that the preliminary drawing including site plans of all major works should be sent to the Director of Public Health for comment prior to their being placed before the Buildings Committee.

- 54. Medical Inspection of Schools and School Children.—Medical inspection is now compulsory in all Anglo-Vernacular, English, and Normal Schools. In Vernacular Schools, it is still optional. Reports were received from 117 schools this year compared with 108 in 1927. Out of 36,368 pupils on the roll in these schools 34,110, being 93'79 per cent. were medically examined. Out of the total number examined, 60'38 per cent were found protected against small-pox by primary vaccination only, 33'86 per cent by re-vaccination, 3'55 per cent by small-pox itself, while 2.21 per cent were found unprotected. The most common defects found during the examination were defective teeth (19.95 per cent), enlarged tonsils (15'90 per cent), skin diseases (7'13 per cent), defective vision (6.31 per cent) and trachoma (4.76 per cent). A proposal mentioned in the Annual Report for 1926 for the creation of an appointment of an Assistant Director of Public Health for schools is under consideration of Government. In the meantime, the work of School Medical Officers of Health remains almost completely unchecked.
- 55. Sanitary Condition of Mines.—The report on the Burma Corporation Mines at Namtu along with a summary of the sanitary condition of the mines in other districts is published as Appendix C.
- 56. The Burma Ghee Adulteration Act of 1917.—This Act is still in operation although a Food and Drugs Act has now been passed. The question of the repeal of the former when the latter Act becomes operative is under consideration.

In 1927, 129 samples of ghee were examined and 54 found adulterated, giving a percentage of adulterated samples of 42. In 1928, 176 samples were taken and 26 returned adulterated, giving a percentage of adulterated samples of only 15. This would appear to indicate a marked improvement as a result of the Act but there are other factors in operation, such as the decisions of the Law Courts to be taken into account which complicate the issue.

There is a proposal now before Government to recruit a fully qualified Public Analyst who would be appointed Chemical Examiner for the purposes of the Ghee Adulteration Act.

Twenty cases this year together with eight carried over from last year were sent up for prosecution and 19 convictions were obtained, the fines realised amounting to Rs. 3,345 in 1928 as compared with Rs. 1,775 in 1927. Akyab Municipality sent four samples for examination out of which one was found adulterated and a successful prosecution instituted.

57. The Burma Food and Drugs Act, 1928.—This Act was passed in the month of February, its object being "to make better provision for the sale of food and drugs in a pure state in Burma." Government rules contemplated in section 8 of the Act have not yet been formulated and therefore the provisions of the Act have not hitherto been extended to the territory of any local body. It is hoped that with the recruitment of a fully qualified analyst referred to in the previous paragraph it will be possible to go ahead with the preparation of standards and rules under this Act.

RANGOON, 13th July 1929.

G. JOLLY, Lieut.-Col., I.M.S.,
Officiating Director of Public Health, Burma.

APPENDICES.

			PAGE
APPENDIX	A.—Annual Report of the Water and Sewerage Engineer, Publ Works Department, for the year 1928	ic	40
APPENDIX	B.—Annual Report of Public Health Board	•••	49
APPENDIX	C.—Sanitation of Mines	•••	51
APPENDIX	D.—Aimual Report of Fort Treatm Officer, Linguist,	•••	55
APPENDIX	butted from the fryglene rubhetty barette	• • •	65
STATEMENT	A.—Showing the Income and Expenditure on Civil Sanitan Works in Yowns and Districts of Burma during the year.	ry ar	70
	1927-20	• • •	72
STATEMENT	No. I.—Births	• • •	
	No. II.—Deaths	•••	74
	No. II (a).—Dittis and Deaths in Dackward in Section 11	• • •	76
STATEMENT	No. III.—Deaths by Months	• • •	78
	No. IV.—Deaths by rige periods	•••	80
STATEMENT	No. IV (a)—Details of Deaths by Age-periods under one year	•••	82
	No. V.—Deaths by Classes	•••=	84
STATEMENT	No. VA.—Deaths according to Sex in the four main classes	• • •	8 6
STATEMENT	No. VIA.—Births and Deaths in Rural Areas	•••	88
STATEMENT	No. VIB.—Births and Deaths in Urban Areas	•••	90
STATEMENT	No. VIB. (a).—Details of Deaths in Towns under certain speci	fic	04
	causes ···	•••	94
	No. VII.—Deaths from Choleta	•••	102
	No. VIII.—Deaths from Small-pox	•••	104
	No. IX.—Deaths from Fevers	•••	106
	No. X.—Deaths from Dysentery and Diarrhæa	•••	108
STATEMENT	No. XI.—Deaths from Respiratory Diseases	•••	110
	No. XII.—Deaths from Plague	•••	112
STATEMENT	No VI (a) Provincial.—Births, Deaths and Infant Mortality Towns with Population of 10,000 and over	in 	114

APPENDIX A.

Narrative Progress Report of estimates prepared and works carried out by the Water and Sewerage Engineer, Public Works Department, Burma, for the year 1928.

I.—WATER SUPPLY.

- 1. Tharrawaddy Jail.—Estimate amounting to Rs. 94,150 for water supply to Jail was prepared and submitted to the Inspector-General of Prisons, for sanction and allotment of funds.
- 2. Military Police Lines and Stud Farm, Pyawbwè.—Estimate amounting to Rs. 9,000 for surface well elevated tank and installing pumping machinery for water supply scheme. Work completed.
- 3. Military Police Lines and Stud Farm, Pyawbwè.—Estimate amounting to Rs. 8,622 for distribution system to water supply scheme. Work completed.
- 4. Paungdè.—Estimate amounting to Rs. 5,040 for water supply scheme survey. The work is in progress.
- 5. Rangoon University.—Estimate amounting to Rs. 36,606 for constructing a masonry tank 150,000 gallon capacity in three units complete. Work completed.
- 6. Rangoon University.—Estimate amounting to Rs. 45,000 for constructing an elevated tank 100,000 gallon in two units raised 55 ft. high to bottom of tank complete with all fittings, etc. Work completed.
- 7. Rangoon University.—Estimate amounting to Rs. 29,977 for sinking three additional 12" tube wells and Deep Well pump scheme for 5" tube well was prepared and submitted to the Secretary, Rangoon University Building Trust, through the Chief Engineer, Public Works Department, Burma.
- 8. Rangoon University.—Estimate amounting to Rs. 47,282 for air lift pumping scheme, Rangoon University, was prepared and submitted to Secretary, Rangoon University Building Trust, through Chief Engineer, Public Works Department.
- 9. Moulmein Jail.—Estimate amounting to Rs. 5,915 for providing a pumping plant for temporary water supply. Work completed.
- 10. Moulmein Jail.—Estimate amounting to Rs. 7,784 for permanent water supply scheme. The work is in progress.
- 11. Shwebo Jail.—Estimate amounting to Rs. 3,843 for water supply scheme. Work completed.
- 12. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 730 for providing $1\frac{1}{2}$ G.I. pipe connection to 42" Hlawga main from reservoir. Work completed.

- 13. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 8,543 for sinking 6" experimental tube well at a site some 2,500 feet east of present tube wells for increased water supply. Work completed. This tube well was not successful.
- 14. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 1,940 for lifting up the tube wells, air and eduction pipe and refixing after repairing the leakage in the pipes. Work completed.
- 15. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 1,229 for fixing water meters for Lesser Staff quarters, Female Acute Block, Male Acute Block, Superintendent and Deputy Superintendent's quarters. The work is in progress.
- 16. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 28,261 for sinking a 10" Ashford Strainer tube well and putting in 5" strainer inside 6" tube well near Pazundaung Creek for water supply scheme. The work is in progress,
- 17. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 674 for contour survey of garden water supply. Work is in progress.
- 18. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 8,064 for temporary garden water supply. The work is in progress.
- 19. Dufferin Hospital, Rangoon.—Estimate amounting to Rs. 531 for providing two lawn hydrants in front of main building. The work is in progress.
- 20. Dufferin Hospital, Rangoon.—Estimate amounting to Rs. 536 for extending the old tube well and filling up the surface well. Work completed.
- 21. Inspector's quarters No. 1, North Bazaar Road, Rangoon.—Estimate amounting to Rs. 746 for providing a water supply to the quarters. Work completed.
- 22. Tamwe Police Station, Rangoon.—Estimate amounting to Rs. 5,807 for providing special service main from R.E.T. & S. Co.'s pumping station for water supply. Work completed.
- 23. Vaccine Depôt, Meiktila.—Estimate amounting to Rs. 9,690 for remodelling of water supply to Vaccine Depôt. The work is in progress.
- 24. Central Jail, Insein.—Estimate amounting to Rs. 350 for installing a pumping plant for temporary water supply scheme. Work completed.
- 25. Central Jail, Inscin.—Estimate amounting to Rs. 7,770 for sinking an additional tube well and installing an electrically driven centrifugal pump and necessary connections for water supply was prepared and submitted to Inspector-General of Prisons for sanction and allotment of funds
- 26. Central Jail, Insein.—Estimate amounting to Rs. 200 for temporary connections between tube well pumping plant and elevated tank of the jail. Work completed.

- 27. C.I.D. Lines, Insein.—Estimate amounting to Rs. 619 for providing a fire hydrant for C.I.D. Headquarters. Work completed.
- 28. C.I.D. Lines, Insein.—Estimate amounting to Rs. 3,978 for extension to water distribution to Personal Assistant's quarters. The work is in progress.
- 29. C.I.D. Lines, Insein.—Estimate amounting to Rs. 436 for fixing a 2" C.I. Siemens water meters at the lines. The work is in progress.
- 30. Government House, Rangoon.—Estimate amounting to Rs. 626 for proposed water supply to Accountant and clerk's quarters in the compound. Work completed.
- 31. Government House, Rangoon.—Estimate amounting to Rs.3,251 for temporary hot and cold water supply and drainage for the camps during His Excellency the Viceroy's visit. Work completed.
- 32. New Telegraph Office, Rangoon.—Estimate amounting to Rs. 788 for fixing Rees Roturbo pump to the existing meters. Work completed.
- 33. Agricultural College, Mandalay.—Estimate amounting to Rs. 178 for modification of water supply in Botanical Laboratory. Work completed.
- 34. Pyinmana Forest School.—Estimate amounting to Rs. 743 for plugging off seepage water and water from central adit pipe at the school. The work is in progress.
- 35. Prisoners of War Camp, Shwebo.—Estimate amounting to Rs. 525 for testing the surface well at the camp. The work is in progress.
- 36. Agricultural Farm, Hmawbi.—Estimate amounting to Rs. 1,798 for laying out a new pipe line at the farm. Work completed.
- 37. Zigôn Water Supply.—Estimate amounting to Rs. 861 for survey work in connection with drawing up a water supply scheme for the town. The work is in progress.
- 38, Technical Institute, Insein.—Estimate amounting to Rs. 840 for fixing 3" full bore Siemens water meter was prepared and submitted to Principal, Technical Institute, Insein, for sanction and allotment of funds.
- 39. Technical Institute, Insein.—Estimate amounting to Rs. 944 for providing a sand trap over tube well at Technical Institute, Insein, was prepared and forwarded to Principal, Technical Institute, Insein, for sanction and allotment of funds.
- 40. Mandalay Water Supply.—Estimate amounting to Rs. 1,10,856 for temporary water supply scheme at Mandalay was sanctioned. Tenders received and under consideration. Action awaits payment of share of cost Rs. 18,000 by the Municipality and also settlement of site which is being taken in hand by the Municipal Committee.
- 41. Mandalay Water Supply.—Estimate amounting to Rs. 38,464 for water supply scheme survey and investigation. The work is in progress.
- 42. Taungdwingyi Water Supply.—Estimate amounting to Rs. 12,400 for sinking an additional tube well, out of which Rs. 5,000 was given

by the Municipality for testing the yield of the existing four wells. This work was carried out and completed.

- 43. Chandwingon Village.—Estimate amounting to Rs. 7,440 for sinking a 6" dia. tube well at Chandwingôn village was prepared and submitted to the President, Kambe Town Committee for disposal.
- 44. Kambe.—Estimate amounting to Rs. 24,800 for sinking a 6" tube well at Kambe was prepared and submitted to President, Kambe Town Committee, for disposal.
- 45. Reformatory School, Insein.—Estimate amounting to Rs. 567 for providing stand pipes at Teachers and Warder's quarters in the school.
- 46. Myaungmya Jail.—Estimate amounting to Rs. 3,075 for arrangements for drinking purpose at jail was approved by Inspector-General of Prisons, Burma. Work will be put in hand during the current year.
- 47. New Medical College, Rangoon.—Estimate amounting to Rs. 1,925 for providing service pumps to the College. Work completed.
- 48. Central Jail, Bassein.—Estimate amounting to Rs. 1,585 for cleaning and testing of a surface well at Jail, Bassein. The work is in progress.
- 49. A.-V. High School, Insein.—Estimate amounting to Rs. 812 for providing Purita fountain for main building of the school. The work will be carried out during the current year.
- 50. Henzada Water Supply.—Estimate amounting to Rs. 700 for fixing a gauge at Henzada Shore in connection with water supply scheme was prepared and forwarded to the President, Henzada Municipality, for disposal.
- 51. Harcourt Butler Institute.—Estimate amounting to Rs. 402 for proposed experiments Rat House in the Hygiene Institute. Work completed.
- 52. Reformatory School, Insein.—Estimate amounting to Rs. 1,215 for proposed extension of water supply to the Assistant Principal and Teachers' quarters at Reformatory School, Insein. The work is in progress.

Several estimates for surface wells, supplies, etc., were examined and reported on.

II.—SEWERAGE, SEWAGE DISPOSAL AND SANITARY SCHEMES.

- 1. Insein Civil Hospital.—Estimate amounting to Rs. 42,302 for sanitation, water supply and sewerage scheme. The work is in progress.
- 2. Harcourt Butler Institute of Public Health, Rangoon.—Estimate amounting to Rs. 693 for supplying and fixing additional laboratory tables and fittings. Work complete.
- 3. Maymyo.—Estimate amounting to Rs. 26,917 for proposed Pail Depôt between block 13A and Nyaungdaw Pagoda and 12" wide metalled from the junction of Pucca Road to site of Pail Depôt at Maymyo, was prepared and submitted to the President, Maymyo Municipality, for disposal.

- 4. Maymyo.—Estimate amounting to Rs. 6,169 for proposed Pail Depôt near the site of the septic tank at Maymyo was prepared and submitted to the President, Maymyo Municipality, for disposal.
- 5. Latter Street Police Station.—Estimate amounting to Rs. 18,259 for sanitation to Latter Street Police Station, Rangoon. The work is in progress.
- 6. New General Hospital, Rangoon.—Estimate amounting to Rs. 571 for proposed single seated latrine for use of the servants attached to residential quarters, west side of the compound. Work completed.
- 7. New General Hospital, Rangoon.—Estimate amounting to Rs. 2,556 for proposed sewerage screening chamber at New General Hospital, Rangoon. The work is in progress.
- 8. High Court of Judicature, Rangoon.—Estimate amounting to Rs. 941 for proposed urinal for Bar Library Room was prepared and forwarded to the Registrar, High Court, for sanction and allotment of funds.
- 9. High Court of Judicature, Rangoon.—Estimate amounting Rs. 1,356 for supplying and fixing Rees Roturbo pump for water supply to the building. Work completed.
- 10. Kemmendine Dispensary.—Estimate amounting to Rs. 1,511 for providing sanitary fittings and water supply in the main building of the hospital. Work completed.
- 11. Police Lock-up, Wakèma.—Estimate amounting to Rs. 1,823 for providing water borne closet with septic tank at the Lock-up was prepared and sanctioned by the Deputy Inspector-General of Police, Burma. The work will be put in hand on receipt of funds.
- 12. Dufferin Hospital, Rangoon.—Estimate amounting to Rs. 27,961 for hot water installation to the hospital was prepared and submitted to the Chief Engineer, Public Works Department, Burma, for sanction and allotment of funds.
- 13. Dufferin Hospital, Rangoon.—Estimate amounting to Rs. 773 for proposed additional lavatory basins to the Maternity Ward in the hospital was prepared and submitted to the Superintending Engineer, Rangoon Circle, for sanction and allotment of funds.
- 14. Dufferin Hospital, Rangoon.—Estimate amounting to Rs. 96 for additions and alterations to the sanitary fittings, Gynæcological Ward of the hospital. Work completed.
- 15. New Law Courts, Rangoon.—Estimate amounting to Rs. 6,200 for sewerage scheme to the building. Work completed.
- 16. Central Telegraph Office, Rangoon.—Estimate amounting to Rs. 520 for proposed sink and wash-up at cook-house attached to Testing Telegraph Master's quarters. Work completed.
- 17. Technical Institute, Insein.—Estimate amounting to Rs. 3,524 for providing additional four-seated latrine for menials of the Institute was prepared and submitted to Principal, Technical Institute, for disposal.

- 18. Technical Institute, Insein.—Estimate amounting to Rs. 8,479 for combined sewage outfall works (conversion of macerating tank) was prepared and submitted to Principal, Technical Institute, for disposal.
- 19. Civil Hospital, Mandalay.—Estimate amounting to Rs. 5,489 for additions to Women and Children's Block. The work is in progress.
- 20. Civil Hospital, Mandalay.—Estimate amounting to Rs. 4,610 for removal of 3 Nos. European water closets in Women and Children's Block and substituting Indian water closets and providing 3 Nos. other Indian water closet in Linen rooms in East annexes and 1 No. European type in Linen room next to lift at Mandalay General Hospital. Work completed.
- 21. Civil Hospital, Mandalay—Revised estimate amounting to Rs. 1,30,714 for sanitation, water distribution and sewerage scheme. Work completed.
- 22. Agricultural College, Mandalay.—Estimate amounting to Rs. 825 for addition to mechanical ventilation to College Building is prepared and submitted to the Director of Agriculture for sanction and allotment of funds.
- 23. Government House, Maymyo.—Estimate amounting to Rs. 1,611 for sanitary installation to Personal Assistant's quarters. Work completed.
- 24. Town Lock-up, Rangoon.—Estimate amounting to Rs. 2,205 for additional sanitary accommodation for constables at the Lock-up. The work is in progress.
- 25. Medical College, Rangoon.—Estimate amounting to Rs. 2,260 for sanitary installation to Assistant Superintendent's quarters in the compound was prepared and forwarded to the Superintending Engineer, Rangoon Circle, for sanction and allotment of funds.
- 26. New Custom House, Rangoon.—Estimate amounting to Rs. 1,017 for additions and alterations to laboratory fittings in ground floor of the building was prepared and submitted to the Chief Collector of Customs. Same was returned for revision.
- 27. New Custom House, Rangoon.—Estimate amounting to Rs. 973 for additions and alterations to the Laboratory fittings at ground floor of the building was prepared and forwarded to the Chief Collector of Customs for sanction and allotment of funds.
- 28. New Custom House, Rangoon.—Estimate amounting to Rs. 213 for additions and alterations to Laboratory fittings at ground floor at New Customs Building was prepared and forwarded to the Chief Collector of Customs for sanction and allotment of funds.
- 29. Mingaladon Cantonment.—Estimate amounting to Rs. 5,248 for house sanitation and sewerage scheme to Public Works Department Overseer's quarters and Coolies Lines at 14th mile, Prome Road, Insein, was prepared and forwarded to Superintending Engineer, Rangoon Circle, for sanction and allotment of funds.

30. Tamwe Police Station.—Estimate amounting to Rs. 32,390 for sanitation, water supply and sewerage scheme to the Police Station was prepared and forwarded to the Superintending Engineer, Rangoon Circle, for sanction and allotment of funds.

31. A.-V. High School, Insein.—Estimate amounting to Rs. 803 for providing single seated latrine at servants' quarters. Work completed.

32. Divisional Forest Officers' quarters.—Estimate amounting to Rs. 379 for providing water supply and shower bath direct into the bath room of the quarters was prepared and forwarded to the Divisional Forest Officer, Yamèthin Division, Pyinmana, for disposal.

33. Estimate amounting to Rs. 459 for providing lavatory basins to the "B" class Officers' quarters was prepared and forwarded to the Superintending Engineer, Rangoon Circle, for disposal. The estimate was returned stating that no further improvement can be sanctioned to the building as standard rent is already in excess of average rent.

34. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 646 for providing o" C. I. Penstock wooden baffle and masonry dwarf wall

at the settling tank. The work is in progress.

35. New Mental Hospital, Tadagale.—Estimate amounting to Rs. 1,777 for providing hand control automatic flushing cisterns at New Mental Hospital, Tadagale. The work is in progress.

36. Rangoon University.—Estimate amounting to Rs. 5,948 for

sanitary installation to Sanitorium buildings. Work completed.

37. Rangoon University.—Estimate amounting to Rs. 4,198 for hot water installation to Dining Hall for University College. Work completed.

38. Rangoon University.—Estimate amounting to Rs. 7,207 for sanitation to Men's Dining Hall for University College Hostel. Work

completed.

39. Rangoon University.—Estimate amounting to Rs. 3,127 for sanitation to Men's Dining Hall for Judson College. Work completed.

40. Rangoon University.—Estimate amounting to Rs. 2,017 for hot water installation to Men's Dining Hall and Kitchen, Judson College. Work completed.

41. Rangoon University.—Estimate amounting to Rs. 16,817 for sanitary installation to proposed masonry sanitary annexes for Prome

and Tagaung Timber Hostel. Work completed.

42. Rangoon University.—Estimate amounting to Rs. 3,199 for

sanitation to Registrar's quarters. Work completed.

43. Rangoon University.—Estimate amounting to Rs. 16,410 for additions and alterations to sanitation to Pagan Hall and house sanitation to officers' quarters, Timber Buildings at Pagan, Prome and Tagaung Timber Hostels. Work completed.

44. Rangoon University.—Estimate amounting to Rs. 31,384 for house sanitation to Principal's quarters, No. 3 Group buildings. Work

completed.

- 45. Rangoon University.—Estimate amounting to Rs. 29,394 for house sanitation to three officers' quarters facing south and Women's Hostel, Judson College. The work is in progercss.
- 46. Rangoon University.—Estimate amounting to Rs. 1,204 for providing a double seated latrine bathing platform at Dining Hall of University College Hostel. Work completed.
- 47. Rangoon University.—Estimate amounting to Rs. 13,930 for substituting Indian water closet for existing European pattern at University College, Men's Hostel and at Junior Officers' quarters was prepared and forwarded to Secretary, Rangoon University Building Trust, for disposal.
- 48. Rangoon University.—Estimate amounting to Rs. 18,390 for sanitation to Officers' quarters and office (U.T.C.) Boat Club and Sweepers' latrine at outfall works was prepared and submitted to Secretary, Rangoon University Building Trust, through Chief Engineer. The estimate was returned unapproved by the Trust due to increase in cost.
- 49. Rangoon University.—Estimate amounting to Rs. 1,931 for proposed sanitary arrangements at the Women's hostel. Work completed

III.—BAZAARS.

Zigôn.—Estimate amounting to Rs. 49,015 for constructing Cloth Bazaar was prepared and forwarded to the President, Zigôn Municipality, for disposal.

Zigôn.—Estimate amounting to Rs. 69,410 for constructing Fish, Meat and Miscellaneous Goods Bazaars at Zigôn was prepared and forwarded to the President, Zigôn Municipality, for disposal.

Several schemes for Bazaars, etc., were received, examined and reported on.

IV.—DRAINAGE.

- Zigôn.—Estimate amounting to Rs. 10,166 for Zigôn Drainage Scheme was prepared and submitted to the President, Zigôn Municipality, for disposal.
- 2. Tada-U, Sagaing District.—Estimate amounting to Rs. 441 for sanitary improvements to Tada-U, Sagaing District, surveying Tada-U to prepare drainage scheme prepared and approved by the Chairman, District Council, Sagaing. The work will be put in hand on receipt of funds.
- 3. Nyaunglebin.—Estimate amounting to Rs. 2,035 for survey work for preparing a drainage scheme was prepared and submitted to the President, Nyaunglebin Municipality, for disposal. Estimate approved and funds received in full. Work will be put in hand immediately the other important works are finished.
- 4. Wakèma.—Estimate amounting to Rs. 2,227 for survey work to prepare a drainage scheme was submitted to President, Wakèma, and approved by the Committee. The work will be put in hand on receipt of funds.

- 5. New Law Courts, Rangoon.—Estimate amounting to Rs. 15,281 for drainage, New Law Courts, was prepared and submitted to the Chief Engineer for sanction and allotment of funds.
- 6. Sagaing.—Estimate amounting to Rs. 3,750 for survey work to prepare a drainge scheme was prepared and forwarded to the President, Sagaing Municipality, for disposal.

Several schemes for drainage were received, examined and reported on.

LAYOUTS.

Proposed layout of Tharrawaddy town lying to the south of the Bazaar Road, west of Rangoon-Prome Road.

Several layout plans were submitted for opinion and returned.

40 at 1 at 1

APPENDIX B.

Annual Report of the Provincial Public Health Board, Burma, for the year 1928.

1. The constitution and functions of the Board remained unchanged throughout the year.

Two new members nominated by the Hon'ble Minister for Educa-

tion commenced their term of office in January 1928.

2. Three meetings of the Board were held during the year under report as in the previous year. The number of projects considered by the Board at these meetings was 18 as against 26 in 1927. The total grants sanctioned during the year was Rs. 2,37,315 as compared with Rs. 3,81,397 in the preceding year. The decrease was due to the fact that there were fewer applications for grants from the Provincial Public Health Board and also to the slow progress made by schemes for which provision was made in the Public Health Budget. A detailed statement of the grants sanctioned is appended to this report.

3. The Projects Sub-Committee of the Board held four meetings during the year and considered 18 projects of which 9 were approved unconditionally, 7 were approved subject to certain modifications being made, one was rejected and subsequently approved at a later meeting

and one rejected.

4. Besides the projects detailed in the statement appended to this report the Board considered and accorded administrative approval to the following:—

- (1) Construction of a meat and fish bazar at Pegu at an estimated cost of Rs. 38,526.
- (2) Construction of a bazaar at Kawkareik at an estimated cost of Rs. 58,427.
- (3) Change of site of refreshment stalls at the Pakôkku bazaar.
- (4) Plans and estimates for the new bazaar buildings at Zigôn at an estimated cost of Rs. 1,18,425.

The Board also considered a proposal for a geological survey of Rangoon in connection with the Rangoon Water Supply Scheme and decided to recommend to the Local Government that a proposal be made to the Director of the Geological Survey for the preparation of a Geological Survey of Rangoon and the surrounding areas. The report on the Geological Survey of Rangoon has since been received.

An application from the Mandalay Municipal Committee for the diversion of the unspent balance from the grant of Rs. 1,31,320 made in 1922 for a survey of a permanent Water Supply Scheme towards a temporary Water Supply Scheme to give relief to the Provincial Police Training School and its neighbourhood which is estimated to cost Rs. 1,10,856 was considered and granted.

- 5. A sum of Rs. 5,92,930 allotted in the Public Health Department Budget for the year 1928-29 as compared with Rs. 9,50,000 for the previous year was at the disposal of the Board for contributions to local bodies for public health purposes. The amount appears larger than it really is, by reason of the fact that a contribution to the Rangoon Water Supply Scheme of Rs. 2,83,800 has been inculded in the figure.
 - 6. The number of projects completed during the year are as tollows:—

Name and nature of Project.	Date o	f completion
1. Construction of latrines at Konzaung and Sagu, Minbu District	t	2-4-28
2. Sinking of a tube well at Salin	•••	11-3-28
3. Construction of a tank at Thôngwa	•••	22-3-28
4. Sinking of 23 wells in Sandoway District	•••	24-2-28
5. Sinking of two experimental tube wells at Sitkwin and Othegon in the Tharrawaddy District	•••	12-3-28
6. Myingyan Drainage Scheme	•••	30-6-28
7. Insein Water Supply Scheme	•••	2-3-28
8. Bathing System and Gas Chamber at the Port		
Health Station, Rangoon	•••	1-6-2 8

Statement showing grants sanctioned by the Provincial Public Health Board during the year 1928.

Name of Project.	Amount sanctioned.	Remarks.
Minhla Water Supply Scheme Sandoway Drainage Scheme Insein Water Supply Scheme Protective works against floods in Pegu Town Anti-Plague measures in Mandalay	Rs. 6,090 3,525 662 36,196 3,708	This was refunded to Government after the close of the year
Cost of digging of wells and tank, Henzada District Cost of digging of wells and tanks, Ma-ubin District Mônywa Water Supply Scheme Tube well at Sitkwin Latrine in the Bazaar at Myebon in the Kyaukpyu District. Mandalay District Water Supply Tharrawaddy Water Supply Scheme		under report.
Total	2,37,315	

APPENDIX C.

Sanitation of Mines.

A.—BURMA CORPORATION, LIMITED, NAMTU.

During the year the Asiatic Hospital was visited by His Excellency Sir Charles Innes, K.C.S.I., C.I.E., I.C.S., and Lady Innes, who expressed their pleasure with the provision made for the treatment of the sick.

Generally speaking the health of the Corporation employees throughout the year has been good.

Construction.

The Dispensary building at the Asiatic Hospital, Namtu, was extended, and a new building for Laboratory was constructed during the year.

An Isolation Hospital and Segregation Camp was built near the Asiatic Hospital at Namtu. This enables us to isolate and observe any suspicious cases of infectious diseases without in any way interfering with the main work in the hospital itself.

Infectious Diseases: their prevention and treatment.

Plague.—One case occurred at Bow-Hlaing; the contacts were inoculated and isolated.

Cholera.— Thirty-six cases with 32 deaths occurred on or near the Corporation's lease during the year. All the necessary precautions were taken.

Relapsing Fever.—One case at Namtu and five cases at Bawdwin occurred with no deaths.

Typhoid Fever.—Twenty-four cases with 4 deaths occurred.

Para-typhoid Fever.—No case.

Small-pox.—One case was imported from Hsipaw, and one from Toungoo. The patients with their contacts were isolated and nearly 180 persons were vaccinated.

Special Diseases.

Rabies.—No case.

Leprosy.—No case.

Beri-beri.—Three cases with no deaths.

Epidemic Dropsy.—Three cases with no deaths.

Tuberculosis.—Eighty-two cases with 42 deaths occurred.

Ankylostomiasis.—Forty-two cases with one death occurred during the year.

Malaria.—A special mosquito brigade headed by a Sanitary Inspector has been on work throughout the rainy season.

Industrial Diseases. .

Plumbism.—Forty-two cases against 51 in the year 1927 occurred.

Miners' Phthisis.—Two cases occurred with no death.

Public Health and Sanitation.

Water Supply.—This has been ample and of good quality.

Milk Supply.—Samples of milk are frequently taken for analysis from licensed vendors and whenever necessary these men are prosecuted.

Meat Inspection.—All animals for slaughter are examined by the Sanitary Inspectors both before and after slaughter. In case of doubt or difficulty the matter is referred to the Chief Medical Officer.

Foodstuffs.—All foodstuffs exposed for sale are periodically exam-

ined and any of poor quality destroyed.

Conservancy.—The system in vogue in previous years continues to work satisfactorily.

Chief Medical Officer,.
Burma Corporation, Limited, Namtus

9

B.—MINES IN MERGUI DISTRICT.

Two tin mines in this district are operated by dredgers and therefore employ a constant number of labourers. The other mines depend upon sluicing and employ a small labour force during the dry weather which is increased considerably in the rains. Chinese labour predominates in the tin mines Two protected wells are provided at the Thabawleik Tin Dredging Company. In all other cases, the water supply is from chaungs and unprotected wells. Each mine has its own general store. Foodstuff and other supplies are obtained either from Mergui or from Tavoy at intervals of a month in the dry weather and once in two or three months during the rains. Rice is stored in bags on trestles. Fresh vegetables and fruits are obtained from the neighbouring villages or from Mergui. In most mines, the superior staff are housed in wooden buildings while labourers are provided with bamboo huts. In a few instances pit latrines exist but usually the jungle is used.

The Thabawleik Tin Dredging Company alone employs a full-time registered medical practitioner; other mines only keep a stock of medicines and materials for first-aid treatment. The District Health Officer points out that in the Pahchaung area there are several mines near one another which could combine and employ a medical attendant

for the group. Hitherto nothing has been done.

C.—MINES IN TAVOY DISTRICT.

The District Health Officer visited the following five mines during the year:—Heinda. Thingandon, Hermyingyi, Taungpilla and Pa-an and Kalanta Mine. While the general health of the labourers is reported to have been good, malaria, especially of the benign tertian type was prevalent, although jungle clearing has to a certain extent reduced the incidence of this disease. At Hermyingyi an efficient dispensary with accommodation for six emergency cases is maintained. The District Health Officer notes that at the mine there are well organised and efficient sanitary arrangements.

The following extract is taken from his diary: -

"Housing.—The great majority of the oriental employees being Chinese, there is a tendency to herd together; dwelling houses, shops, schools and bazaars cling side by side with not an inch of space between them. The densely-crowded part known as China Town would appear at first sight to lend itself to epidemics of cholera, plague and dysentery. These however have been conspicuously absent. Its extraordinary immunity to such outbreaks of disease might be attributed to the very thorough flushing of the main drains that run through the China Town bi-weekly, and to the piped water supply, to say nothing of the activities of the Sanitary Staff." In other mines sanitation is very elementary.

D.—Mines in Thatôn District.

The District Health Officer reports that the general health conditions were good at the Yinnyein and Mayangone mines where there were no epidemics and very little malaria, and the managers had provided medical aid for coolies and had improved the wells.

At the Mokpalin Public Works Department Quarries, general health conditions were good and housing satisfatory, but the absence of latrine facilities was reported by the District Health Officer.

E.—RUBY MINES AREA.

The labour employed by the Burma Ruby Mines Company, Limited, has dwindled considerably since 1927, 143 being the average daily number of workers during the year as compared with 387 in 1927. Most of the mines in the area are at Kathe, a village seven miles from the Mogôk-Thabeitkyin road. The District Health Officer reports that there have been no epidemics and no unusual mortality during the year.

APPENDIX D.

ANNUAL REPORT OF THE TRANSACTIONS OF THE PORT HEALTH
DEPARTMENT FOR THE YEAR 1928.

Staff.

Port Health Officer.

Captain C. G. Crow, K.-i-H., I.M.D.

Assistant Port Health Officers.

- (a) Major G. E. Duckworth, I.M.D., 1st January to 31st December 1928.
- (b) Dr. J. H. Writer, D.P.H., 1st January to 31st December 1928.
- (c) Captain C. W. Rebeiro, I.M.D., 20th February 1928 to 19th November 1928 and 7th December 1928 to 31st December 1928.
- (d) Dr. J. A. Anklesaria, D.P.H., 1st January 1928 to 19th February 1928 and 20th November 1928 to 7th December 1928.

Sub-Assistant Surgeons.

- (a) Mr. M. A. Rauf, 1st January to 31st December 1928.
- (b) Mr. S. Paul, 1st January to 31st December 1928.
- (c) Mr. R. V. Pillai, 1st January to 31st December 1928.

Nurses.

- (a) Mrs. J. Stephenson, 1st January to 31st December 1928.
- (b) Mrs. D. L. Taylor, 1st January to 31st December 1928.
- (c) Mrs. L. Simpson, 1st January to 31st December 1928.

Clerks.

- (a) Mr. M. A. Haq, Head Clerk, 1st January to 31st December 1928.
- (b) Mr. V. G. Muthu, Second Clerk, 1st January to 31st December 1928.
- (c) Mr. M. A. Wahid, Third Clerk, 1st January to 31st December 1928.
- (d) Mr. M. A. Baker, Fourth Clerk, 1st January to 31st December 1928.
- (e) Maung Win Pe, Typist, 1st January to 31st December 1928.
- (f) Maung Kyi, Tally Clerk, 1st January to 31st December 1928.
- (g) Mr. A. P. Moodaliar, Tally Clerk, 1st January to 31st December 1928.
- (h) Mr. M. P. Samuel, Care-Taker, 1st January to 31st December 1928.

2. Inspection of In-coming Vessles.—Vessels from Indian and Foreign ports numbered 1,564 or 109 more than in 1927 and they carried 144,647 members of crew and 385,623 passengers, 1,369 less than in 1927.

Of the above vessels, 1,180 were from Indian ports and 384 from Foreign ports against 1,041 and 414 in 1927.

Vessels visited: (a) Sea-going.—These numbered 1,390 showing an increase of 48 on 1927. They carried 131,678 members of crew and 369,553 passengers, making a total of 501,231 persons inspected. The total number of all persons inspected including outgoing is 576,504. The total number vaccinated is 138,858.

Vessels not visited: (b) Burma Coastal Vessels.—Under General Department Notification No. 34, dated the 25th March 1924, the inspection of 174 vessels were discontinued and were reported to have carried 12,969 members of crew and 16,070 passengers.

3. Regulations under which vessels were visited.—General Department Notification No. 73, dated the 13th March 1917 (Parts I to VII); 54 vessels came under this regulation and reported:

Infectious Diseases.—Thirty-eight cases of infectious diseases (11 more than in 1927) were reported by the Commanders of 31 vessels. Out of these 8 (Cholera) were buried at sea; 1 removed to Rangoon Mortuary and 2 to Contagious Diseases Hospital. The other cases reported included 4 cases of Small-pox (on 4 vessels), 10 cases of Chicken-pox (on 10 vessels), 6 cases of Measles (on 4 vessels), 1 case of Mumps (on 1 vessel), 1 case of Typhoid (on 1 vessel) and 5 cases of Influenza (on 1 vessel).

Out of these cases, 1 case of Chicken-pox and one case of Measles were allowed to go to their residences. Three cases of Influenza were left at other ports, and the remaining cases were sent to hospitals in Rangoon. On the above vessels, 4 more cases of infectious diseases were detected at the Medical inspection, *i.e.*, 3 cases of Chicken-pox and 1 case of Measles.

II. Twenty-four deaths from non-infectious diseases were reported on 23 vessels.

B.—(a) The Amendment Vaccination Act of 1909 was in force up to 31st July 1928. (b) Burma Act IV of Vaccination Law Amendment Act was brought into force from 1st August 1928.

Vessels inspected under (a) 258 and under (b) 553. On 38 of these vessels, 59 cases of infectious diseases were detected during the inspection, viz., 1 case of Plague, 8 cases of Small-pox, 26 cases of Chicken-pox, 13 cases of Measles, 8 cases of Mumps and 3 cases of Influenza.

C.—Vessels inspected under Notification No. 229, dated the 2nd September 1919, numbered 525 cargo and passenger vessels. Eighty Oil steamers of different Oil Companies which moored below Hastings Shoal were inspected by the Works Doctors, who sent their reports to this office. On five of these vessels, 1 case of Measles, 1 case of Mumps, 2 cases of Dengue and 11 cases of Influenza were detected and sent to hospitals in Rangoon.

4. Measures.—As a result of the visits paid under Regulations in force, the following measures were carried out:—

Inspection.—The number of passengers inspected, as under, were

356,919 :--

Under Vaccination Law Amendmen	t Act, 1909	•••	152,435
Under Burma Act IV of 1928	•••	•••	160,455
Under Adjudged as Non-labourers	•••	•••	27,960
Under Influenza Notification	• • •	•••	16,069
	Tota	al	356,919

The following were the results of the measures:—

- (a) Infectious Cases reported and detected.—Aggregated 116, viz., 1 Plague, 11 Cholera, 12 Small-pox, 39 Chicken-pox, 21 Measles, 10 Mumps, 19 Influenza, 2 Dengue and 1 Typhoid. Out of these, 78 were detected under Vaccination and Influenza Notifications.
- (b) Inflamed and Enlarged Glands.—Two cases were sent for examination of gland tissue and no plague bacilli were found.
- (c) Ten lepers were detected during the inspection of passengers and 23 cripples.
- (d) Out of 1,462 cases sent for observation, 25 cases of Pneumonia developed.
- 5. Disinfection.—(a) Of the effects of 396 crew and 4,014 passengers of infected vessels was carried out. (b) Of 353 vessels was carried out of which 74 were washed down with disinfectant solution for infectious diseases.
- 6. Vaccination.—Labourers and crew numbering 312,890 and 76,724 respectively were inspected for vaccination. Out of the former, 137,880 and of the latter, 978 were vaccinated on arrival by the Corporation vaccinators making a total of 138,858 vaccinated by this department.
- 7. Segregation.—(a) Nil. (b) A case of plague was detected on arrival of a vessel from Calcutta and, as the vessel was fully loaded and sailing to the Straits, the Port Health Officers at Penang and Singapore were notified to take necessary action.
- 8. Vessels visited: (a) Riverine.—Nine vessels with 273 crew and 874 passengers reported the occurrence of infectious or suspicious diseases and deaths and underwent the usual measures. Four cases of Cholera, 1 case of Small-pox and 4 ordinary deaths. On these vessels, a case of Small-pox and 4 cases of ordinary diseases were detected. Thirty-four members of crew and 26 passengers were vaccinated.
- 9. Vessels in Harbour.—Sixteen vessels with 540 crew and 259 coolies underwent disintection measures; six cases of cholera, four cases of small-pox, three cases of chicken-pox one case of measles, one case of mumps and one ordinary death were reported and two cases of ordinary diseases detected. Thirty-seven members of crew were vaccinated.

(c) 4,249 pieces of heavy bedding of the Bibby and the P. Henderson Line of steamers were disinfected in steam at a temperature of 240 degrees, each stove being closed for 20 minutes.

10. Inspection of Out-Going Vessels.—Proceeding to ports beyond

India numbered 506 or 32 less than in 1927.

All the 36,750 Asiatic and African members of crew and 22,005 deck passengers of these vessels had their effects disinfected and 10,706 crew and 5,812 passengers including Europeans were inspected. Of these, 686 members of crew and 730 passengers were vaccinated; 3,370 baggage coolies were inspected and their body, clothes and uniforms disinfected in steam prior to their handling passengers' luggage. Temperature was tested on 372 crew and passengers and 141 found normal, while 163 with fever were allowed to embark on the commanders' responsibility; 310 passes were given to relatives of passengers to see them off.

Results.—Two cases of Small-pox, two cases of Chicken-pox and 64 cases of suspicious rise of temperature were detected and sent to hospitals for treatment and observation.

No case of plague was known to have developed among the crew or passengers of these vessels on their outward voyages and no case of rat-plague was reported.

11. Inspection of Measures to prevent ingress of rats into vessels at

wharves was frequently carried out.

- 12. New Members of Crew inspected prior to signing on the ships' articles were 4,101; of these 3,909 were passed fit and 192 were rejected, 12 for Hernia, 64 for Gonorrhæa, six for Syphilis, six for Chancre, 10 for Hydrocele, seven for Orchitis, nine for Debility, 23 for Scabies, 33 for Ringworm, seven for Ulcer, five for E. Glands, one for Balanitis, three for Tuberculosis, two for Bubo, two for Rash and two for E. Testicles; 592 men were vaccinated.
 - 13. Fumigation of Vessels.—Ten vessels were fumigated:—
- (a) Eight vessels while empty to comply with the measures inforce at ports of destination.
 - (b) One vessel for destruction of rats.
- (c) One vessel, Pilot Brig "Beacon," was, at the request of the Port Commissioners, Rangoon, fumigated, free of cost, for Beri-Beriinfection.
- 14. Fend off Certificates were requested by agents of several vessels. Action was taken to see that the requirements were caried out.
 - 15. Miscellaneous Transaction and Remarks.—
- (a) Examination of Port Commissioners' Officers and Employees.— Examination was carried out on 255 candidates and 225 were declared physically fit. (This figure includes superior and menial staff.) Infectious diseases diagnosed among the employees of the Port Commissioners' Establishment included one case of Plague, three cases of

Small-pox, five cases of Chicken-pox, one case of Measles, 35 cases of Mumps, 211 cases of Dengue, 476 cases of Influenza and one case of Cerebro-spinal Meningitis.

(b) Port Commissioners' Dispensary.—The dispensary was open in 1921. The daily average attendance was 148'45 making a total of 45,875.

Sanitation of Port Commissioners' Foreshore.—The sanitation of Port area was undertaken by the Port Health Officer. The Port Commissioners supplied the following staff:—

Sanitary Inspector	•	•••	•••	•••	.1
Assistant Sanitary	Inspectors	•••	•••	•••	2
Sub-Inspector	•••	•••	•••	•••	1
Sanitary Clerk	•••	•••	•••	•••	1
Jamadars	•••	***	•••	•••	2
Maistries	•••	•••	•••	• • •	7
Conservancy	•••	•••	•••	•••	69
Rat smoking	•••	•••	•••	•••	6
Rat trapping	•••	•••	•••	• • •	6
General cleaning	•••	•••	•••	•••	8
Office washing.	•••	•••	•••	•••	4

The sanitation of the Port Commissioners' area has improved greatly.

(c) Vaccination.—The whole of the Port Commissioners' employees, were examined for vaccination and 3,507 were vaccinated as compared with 3,254 in 1927.

Rating and trapping (220 traps)—

Number of rats destroyed by smoking		9,387
Number of rats destroyed by trapping		14,987
Rat holes destroyed	• • •	35,602

Rat Destruction in Port Commissioners' area.—The system is the same as in 1921.

- 16. Port Health Employees and Port Health Police.—Thirty-seven employees and 16 constables reported sick. Disinfection stove was closed for 900 hours. Non-infectious diseases dealt with numbered 4,856.
- 17. Special Remarks.—I should like to thank the undernoted kind-hearted gentlemen for supplying me with Malted Milk so that all sick were able to get a cup of milk before being sent to hospitals:—

Raja Ramanatha Reddiar.

Mr. T. C. Barnabas, K-i-H.

Mr. Hurry Krishna Pillai, M.B.E., M.R.A.S.

Mr. Chan Chore Khine, M.L.C.

18, Port Health Staff.—I would like to record my thanks to the staff: for their wholehearted support.

C. G. CROW, Capt., I.M.D.,

Port Health Officer, Rangoon.

TABLE NO. I.—Statement showing In-coming Sea-going Vessels visited during the year ending the 31st December, 1928.

Total.	ı	3 Number of crew.	11,984 11,352 13,323 13,460 12,728 11,714 12,020 10,546 11,755 12,334 12,334	144,647											
To	Number of vessels.		123 123 123 123 123 123 123 123 123 123	1,564											
		.InfoT 👸	2,410 1,641 2,858 2,876 2,209 1,384 1,394 1,394 2,528 2,528	25,494 1,564											
	Passengers.	E Girls.	880 885 872 887 887 887 887 887	879											
Ports.		Boys.	113 61 79 200 164 164 109 112	1,225											
Foreign Ports.	Number of	E Females.	460 325 815 412 272 272 178 183 183 446 446	4,457											
From		E Males.	1,753 1,195 1,195 1,092 1,094 1,020 1,122 1,122 1,122 1,122 1,122 1,139 1,895	18,933											
		Mumber of crew.	3,251 2,549 3,633 3,207 3,145 2,765 3,207 3,208 3,298 3,291	37,370											
0 10		Number of vessels	. 22 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	384											
		.lntoT ⊚	28,295 36,839 19,419 27,169 27,276 21,236 19,194 24,732 31,032 45,211 50,303	360,129											
	ıgers.	Girls.	449 597 479 589 585 358 482 644 599	6,726											
Ports.	of Passengers.	© Boys.	539 614 614 623 787 787 787 598 412 331 509 509 597 649	6,883											
From Indian Ports.	Number	Number	Number	Number of	Number	Females.	2,003 2,550 1,864 2,174 2,717 2,717 1,390 1,390 1,881 2,464 3,094	26,273							
From		.esikM 3	25,304 33,078 16,562 23,773 25,100 23,955 18,921 17,115 27,327 41,481 45,771	320,247											
		Mumber of crew.	8,733 8,803 9,473 9,527 9,521 8,194 8,194 9,271 7,866 8,485 9,354 8,801	107,277											
		Zalessev of vessels.	99 100 105 105 89 99 102 85 91 102 93	1,180											
				al											
,		Month.	ry ber ber ber	Total											
			January Februar March April May July August Septem October Noveml												

TABLE NO, I,—Statement showing In-coming Sea-going Vessels visited during the year ending the 31st December 1928—concld.

1	1		s of	B Passengers.	375 922 321 243 310 1,395 	4,014																					
		Disinfection	sinfectior	Effects	G Crew.	57 113 56 40 84 84	396																				
		Ω		g Vessels.	23 33 33 33 33 33 33 33 33 33 33 34 54 54 54 54 54 54 54 54 54 54 54 54 54	353																					
			Passengers.	S Vaccinated on wharf.	2,888 3,474 1,977 3,255 4,168 4,507 4,507 10,800 14,098 20,574 36,850	137,880																					
7	Medical inspection and observation.	vaccination.	Passe	S Found profected.	20,128 26,993 12,597 18,060 19,115 17,702 13,047 7,018 8,570 8,570 10,759	175,010 137,880																					
	ion and o	For vac	Crew.	Vaccinated S. Va	13 9 30 112 114 170 204 170 204 113	978																					
	al inspecti		C	S Found Found	4,567 3,956 4,000 4,400 4,277 4,277 8,432 9,354 9,579 9,668	75,746																					
	Medica	For temperature.		S Sick.	101 1113 1004 1777 205 168 1118 110 131 152 127	1,614																					
	,		For tenn	For ten		Lested.	111 133 133 131 133 138 138 130 151 172 172 172	1,852																			
		Total inspected.	Total inspected.		25 Passengers.	27,949 35,636 19,810 27,137 28,810 26,521 26,521 18,975 24,326 31,415 45,244 50,039	356,919																				
					Crew.	10,328 9,906 11,297 11,368 10,168 9,729 10,547 9,094 10,167 10,555 10,393	123,923																				
		sengers.	sengers.		LetoT 2	30,705 38,480 22,277 30,045 31,632 22,547 20,432 26,126 34,039 47,849 52,831	385,623																				
	Total. Number of passengers.			ssengers.	ssengers.		Girls.	533 657 541 683 904 640 441 400 527 790 688 801	7,605																		
		Total.	Total,	Total.	Total.	Total.																			S Boys.	652 675 675 823 823 951 655 466 399 553 758	8,108
					Ňumb	Nump														Females.	2,463 2,875 2,875 2,989 2,989 1,572 3,017 3,542	339,180 30,730					
				. B Males.	27,057 34,273 18,464 25,953 25,049 19,941 18,061 22,982 22,982 43,475 47,666	339,180																					
_						al																					
			Month.	3		· Total																					
1			Mo	J ,	January February March April May June June June June June June June June																						

TABLE NO. II.—Statement showing the amount of work done in connection with Out-going Vessels bound for Ports beyond India

	on.		S Cases detained.	424802889	89
	Inspection.	Temperatures	Allowed on medical at certificate or at Commander's request.	9 8 14 10 10 10 10 10 10 10 10 10	163
	Results of	Tem	∑ Normal.	20 23 11 10 10 10 10 17	141
	Res		Tested.	22 x x 4 2 2 4 x 2 2 2 x 2 2 2 x 2 4 2 2 2 2	372
			Baggage coolies.	190 298 358 371 292 274 301 276 276 276 231 231	3,370
		puv	Passes to relatives	22 22 23 23 10 10 10 10 10 10 10	310
			Lotal.	1,185 1,185 1,185 702 702 330 260 304 332 481 341	5,812
28.		gers.	Girls.	152 252 162 173 173 174 175 175 176 176 176 176 176 176 176 176 176 176	298
ber 19		n Passengers	Boys.	. 20 23 60 49 37 17 16 35 23	340
31st December 1928		Saloon	E Females.	124 223 498 230 185 88 59 109 91 129	1,928
	Inspection.		G Males.	284 279 279 379 295 194 169 189 176 193 309	3,246
tl tl	Shore Ins		S European crew.	050 1,296 1,749 857 887 757 757 707 707	10,706
year ending			LetoT 😇	2,1,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2	22,005
62			Girls.	26 60 83 83 75 75 75 75 75	781
-statement snowing the amount of		Passengers.	© Boys.	20 448 644 720 109 109 55 55	801
		Deck	Females.	92 165 165 205 229 187 128 144 169 198 198	2,028
1132011			. səlald 3	1,070 1,242 1,242 1,885 1,885 1,885 1,453 1,792 1,634 1,089 1,089	18,395
ment s			Asiatic crew.	2,507 3,7445 3,7445 3,230 3,230 3,230 2,850 2,568 2,568	36,750
21016			S Number of vessels.	284 200 200 200 200 200 200 200 200 200 20	506
TABLE NO. 11.—			Month.	January February April May June July September October November	Total
T.V			•	Janua Febru Marc May June June July Augu Septe Octob Nove	

TABLE NO. II.—Statement showing the amount of work done in connection with Out-going Vessels bound for Ports beyond India during the year ending the 31st December 1928—concld.

aratus at	Amount realized.	Rs.	510 220 390 390 495 390 Free.	2,890
vith Clayton App Agent's request.	S Time spent.	H. M.	6 30 5 30 6 0 6 0 8 30 6 0 6 0 6 15 7 15	52 30
Fumigation with Clayton Apparatus at Agent's request.	Sulphur consumed.	Ibs.	300 300 300 350 350 350 300 250	2,850
Funigat	Æ Vessels.			10
	Roxes.		583 872 1,501 965 739 920 781 1,005 947 793 824 554	10,484
Disinfection.	Baggage coolies.		190 298 358 371 292 274 301 276 276 252 231 231	3,370
Disinf	Boots and shoes.		506 642 775 611 494 570 464 756 524 390 436 251	6,419
	Asiatic crew and deck passengers.		3,715 5,727	58,755
	g Indo-Burma Medical Hall,			
ick.	Passengers' Residence.			2
Disposal of Sick.	Contagious Diseases		: : : :	4
Dist	Municipal Observation E Hospital.		2004444000100	46
	General Hospital.		2 HHHH H4 H4	16
	.etnemlis rend other ailments.		474mv2v2l0289	64
ases.	З Сріскеп-рох			. 2
Diseases.	S Small-pox.			2
	E Plague.			:
				:
	Month.		January February March April May June July August September October November December	Total

TABLE NO. III.—Statement showing the Infectious and other diseases reported and detected on In-coming Sea-going and Riverine Vessels during the year ending the 31st December 1928.

		.lstoT bnsrd 🕱	11 18 18 19 11 11 11 11 10 10 10 10 10 10 10 10 10	= 1,646
		S. Total.	29: : : : : : : : : : : : : : : : : : :	42
Corpses.	*Se	Buried by relative	:::::::::::::::::::::::::::::::::::::::	2
Cor	r.A.	g Rangoon Mortua	:0::::::::4	9
		g Buried at sea.	3::::::::::::::::::::::::::::::::::::::	34
		E Total.	1188 11127 110 110 110 110 110 110	1,604
	'S	g Left at other Port	:0:11:::	,
		.brsod no Board.	:::::::::::::::::::::::::::::::::::::::	133
		E B.O.C. Hospital.		14
es.	spital.	G Mrs. Meikle's Hos	:::::::::::::::::::::::::::::::::::::::	
Disposal of cases.		G Residence.	1 10 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	105
sposal		Rangoon Jail.	:::::::::::::::::::::::::::::::::::::::	2
Dis	spital.	eo H noitste neibn I 🕹	:::: ::::::::::::::::::::::::::::::::::	7
		E Military Hospital.	:::::::::::::::::::::::::::::::::::::::	12
		Rangoon General General	:::::::::::::::::::::::::::::::::::::::	54
	Hospitals.	E Observation.	10 10 11 12 32 32 11 11 11 11 11 11 11 11 11 11 11 11 11	1,169
	Hos	Contagious Diseases.	100 110 110 110 110 110 110 110 110 110	100
ort.		© Cases.	:04611 :: :: :: :: :: :: :: :: :: :: :: :: :	18
In Port.		™ Number of vessels	:040:::::::	16
ne.		G Cases.	:40::::::::::4:::4	14
Riverine.	.8	S Number of vessels	:4-::::::::4	6
-		Detected.	1.10 29 1.10 290 1.10 290 1.10 1.10 1.10 1.10	1,486
ing.	Cases.	E Reported.	111 110 111 : 5 ::15 123 :: : : : : : : : : : : : : : : : : :	128
Sea-going.		Total.	11 12 39 21 10 10 10 10 10 22 24 24	1,614
		S Númber of vessels	101 128 111 111 11 11 128 23 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	109
		Diseases.	Plague Cholera Cholera Chicken-pox Measles Typhoid Cerebro-spinal Cerebro-spinal Influenza Dengue, Suspicious illness Ordinary illness Leprosy Enlarged Glands Deaths (ordinary)	Total

APPENDIX E.

List showing the number of copies of Publications distributed from the Hygiene Publicity Bureau during 1928.

Public Health Series.

		NT		Number of
	, ,	Number	T a strongton	
Title of the Publications.		of the	Languages.	copies
		Publica-		distributed.
10-		tions.	(2)	(4)
(1)		(2)	(3)	(4)
Care of Infants	•••	A	In Burmese	17,625
Babies' Food	•••	, B	Do	15,125
Babies' Language	•••	C	Do	11,743
Babies' Development		D	Do	9,174
Why do Babies Cry? •••	,	E	Do	8,104
Small-pox, Cholera and Plague		1	Do	24,563
Small-pox and Vaccination		2	Do	20,631
Maiaria and how to prevent it		3	Do	8,401
Note on Hygiene •••		4	Do	17,243
An Outline of a Talk on Care of B		5	Do	7,401
The Village Well	•••	6	In English	7,614
Do	•••	6A	In Burmese	9,540
The Careless Boatman	•••	7 **	In English and	3,989
The Carciess Boatman			Burmese.	
The Wicked Nat (Plague)	•••	8	In Burmese	15,725
Do		8A	In English	4,397
Facts about Venereal Disease (for 1		9	Do	4,343
Do		9 A	In Burmese	8,415
Prophylactic Inoculation against Cl		10	In English	11,954
Do	•••	10A	In Burmese	15,969
Feeding of Children		11	Do	5,788
Facts about Venereal Disease (for w		12	In English	3,252
Do.		13	In Burmese	7,313
Duties of Parents how to keep Bab	ies Well	14	Do	6.404
Hints on Sickness of Babies	•••	15	Do	8,408
Hook-worm Disease •••	•••	16	In English	2,635
Do	• • •	17	In Burmese	8,474
	••	18	In English	3,212
Leprosy		19	In Burmese	4,748
D0.	• • •	20	In English	4,368
Consumption		21	In Burmese	12,646
Do •••	•••	22	In English	3,813
A Dialogue on Plague Do	•••	23	In Burmese	8,442
DO.	•••			
Cholera and its Preventive Measur	es	24	Do	12,954
Happiness destroyed or the Stor	ry of the	25	In English	4,698
Blind Boy and the Ugly Girl (S	Small-nox			
and its prevention	Jiiiii pox			
and its prevention).		26	In Burmese	9,831
Do	• • •			
Flica		27	In English	4,472
Flies ···	•••	28	In Burmese	18,140
Do	•••	1		
,				tatata a sare

Public Health Series—contd.

Title of the Publications. (1)	Number of the Publications.	Languages,	Number of copies
	of the Publica- tions.	Languages, ·	copies
	Publica- tions.		
(1)	_		distributed.
(1)	100		
	(2)	(3)	(4)
Blindness amongst Babies	29	In English	6,886
Do	30	In Burmese	5,961
Malaria and Mosquitoes	31	In English	4,757
Do	32 33	In Burmese In English	15,960
Mosquitoes	34	In English In Burmese	4,489
Vaccination and Inoculation	35	Do	11,469
Antenatal Care and Confinement	36	In English	5,572
Do	37	In Burmese	11,856
Sanitation of Fairs and Pagoda Festivals	38	In English	3,483
Do	39	In Burmese	7,683
-Village Sanitation	40	In English	3,325
Do	41	In Burmese	14,741
Prevention of Influenza	42	Do	17,901
Do •••	43	In English	3,793
Rabies	44	Do	4,834
Do	45 46	In Burmese In English	4,936 3,553
Dysentery	47	La Diamas one	8,304
Do Prevention is better than Cure (Plague and	48	Do	19,113
Evacuation).		D0	17,115
Do	48A	In English	2,314
One of the Enemies of Mankind (Malaria)	49	In Burmese	4,639
Dangers of Shallow Well	50	Do	12,079
Measles and its Prevention	51	In English	4,097
Do	52	In Burmese	6,544
A Lesson on Consumption	53 '	Do	12,195
A Lesson on Malaria	54	Do	6,144
A Wise Collegian (Flies and Communicable Disease)	33	Do	23,804
able Disease). Notes on Personal Hygiene	56	Do	32,980
The Dangers of Small-pox	57	In English	6,452
Do. ' · · · · · · · · · · · · · · · · · ·	58	In Burmese	9,482
A Lesson on Microbes	59	Do	6,121
The Story of Maung Maik the Leper	60	Do	6,824
Do	60A	In English	2,204
Child Welfare	61	Do	5,805
Do	62	In Burmese	14,190
A Few Useful Hints	63	Do	4,691
A Few more Facts about Leprosy	64	Do	5,036
Facts about Respiratory Diseases	65	Do	
Evil of Opium Typhoid Fever and its Prevention	67	Do	5,85 1 9.86 7
The Abuse of Alcohol	68	In English	1 200
Do	69	In Burmese	8,538
Trachoma: its nature, etc		In English	3,380
Do	71	In Burmese	2 710
	-		
An Open Letter to the Parents of School		In English	4,290
Children. A Topic on the Medical			
Inspection of School Children.	73	In Rurmass	0.500
Do.	/3	In Burmese	9,590
What Children should know. A Talk on	74	In English	5,116
Opium Habit.		in English	3,110
			-

Public Health Series—concld.

			1
	Marin		Number of
	Number		Number of
Title of the Publications.	of the	Languages.	copies
Title of the Lubileactoris.	Publica-	**************************************	distributed.
	tions.		
(1)	(2)	(3)	(4)
A Tolly on	75	In Dummings	8,034
What Children should Know. A Talk on	7.5	In Burmese	0,034
Opium Habit.	5 .	w w 1 1 1 1	4 104
What Youngmen should know	76	In English	4,104
Do	77	In Burmese	11,771
A Dialogue on Cholera	78	In English	3,556
Do	79	In Burmese	20,000
The Village Well or the Story of Maung Lu	80	In English	10,000
Byo and Ma Saw May the School Mistress.	Q	,	, and the second
Do.	81	In Burmese	10,000
	82	T. ID11-1-	2,205
Yaws	83		2,203
Do	83	In Burmese	•••
	7		1
	7	0.1]
		41.1	
Total			809,445
* ***			
		1	
n 11. TT	111. 0 1	6	•
Public Head	un Caras.		
	1		1
1		r n 11 1	= 425
Prevention of Blindness amongst Boys and	1	In English	5,425
Girls.			- 0-4
Do	2	In Burmese	7,950
Prevention of Blindness amongst Men and	3	In English	4,150
Women			
Do	4	In Burmese	5,236
Instructions for Prevention of Consumption	5	In English	3,151
TO TO THE PARTY OF	6	In Burmese	9,706
	7	W 73 11 1	5,194
Instructions for Prevention of Cholera			
Do	8	In Burmese	23,920
Instructions for Prevention of Malaria	9	In English	4,877
Do	10	In Burmese	9,217
Instructions for Prevention of Small-pox	11	In English	3,744
Do. •••	12	In Burmese	12,068
Instructions for Prevention of Plague	13	Do	5,301
Instructions for Prevention of Measles	14	Do	5,217
Instructions for Prevention of Dysentery	15	Do	5,402
Instructions for Prevention of Flies •••	16	Do	6,967
	17	In English	3,143
Common Colds	18	1 * n	
Do			6,102
Chicken-pox and its Prevention	19	In English	3,643
Do	20	In Burmese	5,127
Instructions regarding Fresh Air	21	In English	5,918
Do	22	In Burmese	8,301
Advice to Mothers (Vaccination)	23	In English	5,117
Do	24	In Burmese	6,976
O1 '1!	25	In English	2,999
The state of the s	26	In Burmese	4,145
0 1	27	W TO 11 1	2,905
Gonorrhoea			
Do	28	In Burmese	3,582
The Rules of Health for Children	29	In English	2,201
Do	30	In Burmese	2,200
Total	•••		179,884
	i		

Public Health Posters.

Title of the Publications.	Number of the Publications. (2)	Language.	Number of copies distributed.		
Small-pox Cholera Flies Total	•••	1 2 3 	In Burmese Do Do	4,103 5,128 3,628 12,859	

Public Health Lectures.

A Magic Lantern Lecture on Tuberculosis A Magic Lantern Lecture on Cholera A Lecture on Cholera Do	1 2 3 4	In English Do Do In Burmese	204 204 214 313
A Magic Lantern Lecture on Tuberculosis	4 5	Do	313
A Magic Lantern Lecture on Plague	6	In English	314
Do the Constitution	7	In Burmese	323
The Danger of Flies and how they Spread	8	In English	214
Diseases. A Lecture on Venereal Disease	9	Do	264
Do	10	In Burmese	363
A Magic Lantern Lecture on Child-Welfare	11	In English	1,254
A Lecture on Child-Welfare	12	In Burmese	1,823
A Lecture on Consumption	13	In English	214
Do	14	In Burmese	316
A Magic Lantern Lecture on Child- Welfare.	15	Do	323-
A Magic Lantern Lecture on Cholera	16	Do	313-
Lecture on Rabies or Canine Madness	17	In English	•••
Do	18	In Burmese	•••
Lecture on Hook-Worm Disease	19	In English	•••
Do	20	In Burmese	•••
Total ·			6,969

Public Health Handbills.

Handbills Do.	•••		1 2	In Eng In Bu	glish . rmese .	10,000
	Total	•••		•	•	20,000
Total of Public Hea	1th Series dist	ributed		•••	•••	* 809,445.
Total of Public Hea				•••	•••	179,884
Total of Public Hea				•••	•••	12,859
Total of Public Hea	ilth Lectures d	istributed		•••	•••	6,9 69
Total of Public Hea	alth Handbills	distributed	d	•••	•••	20,000
	Tota	al distribu	ted to the	Public	•••	1,029,157
Supplied	l to the Depart	ment of P	ublic Inst	truction	•••	2,346,000
•			GRAND	TOTAL	•••	3,375,157

1.6 - I - I - I - I - I - I "

STATEMENT A.—Statement showing Total Income from all sources and Expenditure in

							Amount	
Name of Division.		Total receipts including	Total Ex- penditure on Public	Water	supply.	Drain	age.	
		opening balance.	Health purposes.	Capital outlay.	Establish- ment, repairs- etc.	Capital outlay.	Establish- ment, repairse etc.	
	7	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Towns in— Arakan Division	•••	3,41,594	1,83,926	2,478	54,849	•••	19	
Pegu Division	•••	2,06,68,166	41,66,540	5,63,830	8,51,709	1,94,929	3,13,112	
Irrawaddy Division	•••	20,42,460	5,37,027	2,968	49,221	10,444	4,780	
Tenasserim Division	•••	17,09,386	3,47,196	1,670	18,418	•••	893	
Magwe Division	•••	11,29,598	3,45,794	1,12,775	19,998	•••	10,550	
Mandalay Division	• • •	33,00,532	10,78,606	2,52,376	1,09,084	22,086	28,735	
Sagaing Division	•••	6,85,139	1,80,465	3,935	19,322	96	702	
Total	•••	2,98,76,875	68,39,554	9,40,032	11,22,601	2,27,555	3,58,791	
Districts in—		8,08,216	47,135	834	1			
Arakan Division	• • •	44,51,560		65,765	10,863			
Pegu Division Irrawaddy Division	•••	36,19,781	6,42,692	38,319	425			
Tenasserim Division		51,81,269		1,188		339		
Magwe Division	• • •	12,36,624		2,842	14,768			
Mandalay Division	•••	10,53,810		2,€55	22,294	368	•••	
Sagaing Division	• • •	18,34,577	1,79,412	13,394	9,318	3,497	830	
oughing Division	• • •			, , ,				
Total	•••	1,81,85,837	14,44,988	1,24,997	57,669	4,204	830	
GRAND TOTAL, BURMA	•••	4,80,62,712	82,84,542	10,65,029	11,80,270	2,31,759	3,59,621	
Federated Shan States— Towns	• • •	2,78,991	1,19,403	30,251	30,251 3,495 2,856		3,899	
Rural areas	•••	1,19,18,456	66,389	1,000	330.	750	900	
Total	• • •	1,21,97,447	1,85,792	31,251	3,825	3,606	4.799	

for Public Health purposes during the financial year 1927-28.

pent on

Conservancy					Charges on	
(including road cleaning and watering) and latrines.	Epidemic charges (includ- ing plague) .	Vaccination.	Registration of births and deaths.	Markets and slaughter-houses.	account of Health Officers and Public Health Inspectors,	Other sanitary requirements.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
80,076	4,264	1,597	1,283	14,614	11,821	12,925
13,62,479	8,785	9,744	97,494	4,52,869	2,74,813	36,776
2,47,284	14,480	7,787	6,436	1,15,430	34,772	43,425
2,13,653	1,784	5,918	7,110	56,534	29,130	12,086
1,12,433	8,349	3,970	1,743	67,315	6,436	2,225
4,10,357	22,335	8,256	11,578	92,463	77,140	44,196
91,471	2,055	2,098	622	39,223	2,920	18,021
25,17,753	62,052	39,370	1,26,266	8,38,448	4,37,032	1,69,654
	,					
0.726	22	0.000		25 901		67 1
9,736	. 22	9,980	•••	25,891 73,008	29,617	814
49,354	477	44,537	•••		8,207	4,71,736
39,172	2,725	57,692	•••	24,416		2,066
16,035	924	35,455	•••	5,896 25,049	5,645	2,653
35,225	1,907	30,007	•••	25,370	6,911	251
37,746	1,134	24,586	•••	28,940	4,379	7,126
55,725	5,529	50,674	•••	20,940	4,379	. 7,120
2,42,993	12,718	2,52,931		2,08,570	54,759	4,85,317
27,60,746	74,770	2,92,301	1,26,266	10,47 018	4,91,791	6,54,971
.59,657	409	280	463	13,939	3,884	270
33,533	1,842	17,277	•••	906	8,507	1,344
93,190	2,251	17,557	463	14,845	12,391	1,614

ANNUAL STATEMENT No. I.--Births registered in the

1	2	1	3			4	rea in the
		Population a	according to Ce	nsus of 1921.	Numbe	er of births reg	istered.
, No.	Divisions and Districts.	Male.	Female.	Total.	Male.	Female.	Total.
4	Arakan Division.					•	
1 2 3	Akyab Kyaukpyu Sandoway	96,569	265,723 103,304 56,725	574,040 199,873 112,029	6,881 1,640 2,064	6,137 1,461 2,033	13,018 3,101 4,097
4 5 6 7	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy	235,324 246,261 201,043	106,789 210,296 246,168 163,581	345,505 445,620 492,429 364,624	3,785 4,547 5,353 4,394	3,641 4,251 5,070 4,160	7,426 8,798 10,423 8,554 5,866
8 9	Insein Prome IRRAWADDY DIVISION.	102 903	134,773 188,772	289,540 371,575	2,995 7,100	2,871 6,819	13,919
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	273,439 196,757	236,526 277,481 173,794 161,593 132,273	489,473 550,920 370,551 330,106 288,994	5,454 6,880 4.322 4,255 3,212	5,048 6,414 4,038 3,893 3,087	10,502 13,294 8,360 8,148 6,299
15 16 17 18 19	Tenasserim Division. Thatôn Amherst Tavoy Mergui Toungoo	223,348 80,994 72,878	225,191 194,562 75,792 62,587 184,378	471,100 417,910 156,786 135,465 381,883	4,310 7,587 3,425 2,292 3,983	3,927 7,155 3,360 2,181 3,776	8,23 7 14,742 6,785 4,4 7 3 7, 7 59
20 21 22 23	Magwe Division. Thayetmyo Minbu Magwe Pakôkku	134,495 211,686	130,123 139,807 211,566 241,828	255,406 274,302 423,252 465,771	3,463 4,115 4,735 6,869	3,494 3,759 4,705 6,738	· 6,957 7,874 9,440 13,607
24 25 26 27 28	Mandalay Mandalay Kyauksè Meiktila Myingyan Yamèthin	70,449 137,573 213,294	173,622 72,228 152,324 228,714 162,276	356,621 142,677 289,897 442,008 323,189	7,294 3,029 3,369 4,525 4,557	6,545 3,037 3,266 4,564 4,423	13,839 6,066 6,635 9,089 8,980
29 30 31	SAGAING DIVISION. Shwebo Sagaing Lower Chindwin	155,054	200,533 171,854 192,230	380,016 326,908 354,148	6,608 4,813 5,570	6,316 4,779 5,540	12, 924 9,592 11,110
·	Total	5,545,205	5,277,413	10,822,618	143,426	136,488	279,914

Districts of Burma during the year 1928. (Paragraphs 9 and 10.)

	5		6	7	8		9		1
Ratio of birt	ths per 1,000 of	population.	Number of males	Excess of births over	Excess of deaths over births	Mean ratio	o of births per 1 revious five yea	1,000 during	
Male.	Female.	Total.	born to every hundred females.	deaths per 1,000 of population.	per 1,000 of popula- tion.	Male.	Female.	Total.	No.
11 ⁻ 99 8 · 21	10 [.] 69 7 [.] 31	22 [.] 68 15 [.] 51	112 112	2 2	•••	13:34 9:78	12·21 9·00	25 ⁻ 55 18 ⁻ 78	1 2 3
18.42	18.15	36:57	102	16	•••	18.68	17.88	36.57	3
10.95 10.20 10.87 12.05 10.34 19.11	10·54 9·54 10·30 11·41 9·92 18·35	21.49 19.74 21.17 23.46 20.26 37.46	104 107 106 106 104 104	 2 6 8 3 8		10.09 12.60 13.18 13.26 13.01 15.79	9.47 11.89 12.48 12.43 12.06 14.97	19·56 24·49 25·66 25·69 25·07 30·77	4 5 6 7 8 9
11°14 12°49 11°66 12°89 11°11	10 [.] 31 11 [.] 64 10 [.] 90 11 [.] 79 10 [.] 68	21.46 24.13 22.56 24.68 21.80	108 107 107 109 104	5 8 6 7 3	•••	12.76 15.16 10.74 13.64 9.94	12.06 14.48 10.41 12.78 9.19	24.83 29.64 21.16 26.42 19.12	10 11 12 13 14
9.15 18.15 21.85 16.92 10.43	8:34 17:12 21:43 16:10 9:89	17.48 35.28 43.28 33.02 20.32	110 106 102 105 105	2 15 17 13	•••	10.76 14.84 18.99 16.16 10.26	9·94 13·72 17·95 14·79 9·66	20.70 28.56 36.94 30.95 19.92	15 16 17 18 19
13.56 15.00 11.19 14.75	13.68 13.70 11.12 14.47	27·24 28·71 22·30 29·21	99 109 101 102	3 2 3 5	•••	15.05 15.71 12.71 17.57	13.85 15.21 11.94 17.21	28·90 30·92 24·64 34·78	20 21 22 23
20·45 21·23 11·62 10·24 14·10	18·35 21·29 11·27 10·33 13·69	38.81 42.52 22.89 20.56 27.79	111 100 103 99 103	2 . 6 . 1 6	•••	19.98 18.06 11.96 12.39 15.78	18·92 17·18 11·78 11·85 15·35	38·90 35·24 23·74 24·25 31·14	24 25 26 27 28
17·39 14·72 15·73	16.62 14.62 15.64	34·01 29·34 31·37	105 101 101	8 5 8	, 	16·13 13·20 16·84	15·48 12·90 16·49	31.61 26.10 33.33	29 30 31
13.25	12:61	25.86	105	5	•••	13.85	13.14	26.99	

Annual Statement No. II.—Statement of Births and Deaths registered

1	2	3	4		5		6		7		
	•		per	Population	on (Censu	s 1921) .	Birth	s.		ber of de	
No.	Divisions and Districts.	Area in square miles.	Average population square mile.	Male.	Female.	Total.	Total number.	Birth-rate per 1,000 of population.	Male.	Femule.	Total,
	Arakan Division.										
1 2 3	Akyab Kyaukpyu Sandoway	5,056 4,387 3,784	113·54 45·56 29·61		265,723 103,304 56,725	574,040 199,873 112,029	13,018 3,101 4,097		1,414	5,439 1,380 1,097	11,835 2,794 2,313
4 5 6 7 8 9	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	77 4 4,083 2,863 1,866 1,903 2,915	109·14 172·00 195·40 152·15	235,324 246,261 201,043	210,296 246,168 163,581 134,773	492,429 364,624 289,540	7,426 8,798 10,423 8,554 5,866 13,919	1;74 21:17 23:46 20:26	4,482 3,883 3,126 2,851	3,580 3,552 2,691	7,435 5,817 5,04 1
	IRRAWADDY Division.										
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	4,127 2,872 2,650 1,640 2,148	191.82 139.83 201.28	252,947 273,439 196,757 168,513 156,721	277,481 173,794 161,593	330,106	10,502 13,294 8,360 8,148 6,299	24·13 22·56 24·68	4,632		8,779 6,073 5,849
	TENASSERIM DIVISION.										
15 16 17 18 19	Thatôn Amherst Tavoy Mergui Toungoo	4,831 7,059 5,308 9,789 6,135	97·52 59·20 29·54 13·84 62·25	223,348 80,994 72,878	194,562 75,792 62,587	417,910 156,786 135,465	8,237 14,742 6,785 4,473 7,759	35.28 43·28 33·02	4,691 2,151	2,012 1,210	8,566 4,163 2,645
20 21 22 23	MAGWE DIVISION. Thayetmyo Minbu Magwe Pakôkku	4,750 3,293 3,687 6,210	83·30 114·80	134,495 211,686	139,807 211,566	255,406 274,302 423,252 465,771	6,957 7,874 9,440 13,607	28.71	3,733 4,096	3,176 3,645 3,959 2,5,807	7,378 8,055
	MANDALAY DIVISION.			,							
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan	2,287	111·29 126·76 160·96	70,449 137,573 213,294	72,228 152,324 228,714	1 442,008	13,839 6,066 6,635 9,089 8,980	42.52 22.89 20.56	2,582	2,576 3,244 4,483	6,314 8,999
29 30 31	Sagaing	5,604	179.13	155,054	171,85	3 380,016 4 326,908 0 354,148	9,592	29.3	4,94 4,3,96 7 4,11		8,114
	Total	- 115,060	94°00	5,545,205	5,277,41	3 10,822,613	8 279,914	25.8	6 121,43	6 108,88	230,322

the Districts of Burma during the year 1928. (Paragraphs 9, 15, 21, 28, 32, 34 and 35.)

8						9							10		1
of males deaths of				Deaths	s per 1,0	000 of po	opulatio	n from				1,000 0	utio of de during pr five years	evious	
of deaths o					and			ses.	A	ii cause	s.				No.
Number of de to every hun females.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery Diarrhœa.	Respiratory diseases.	Injuries.	All other causes.	Male.	Female.	Total.	Male,	Female,	Total.	
118 102 111	2·45 0·85 0·19	0.02 0.01 0.02		11·72 7·09 8·98		0.93 0.15 0.45	0·18 0·12 0·46	3·50· 5·49 9·95	1	20·47 13·36 19·34		18·07 14·62 24·03	18:74 13:22 21:76	18·38 13·90 22·88	1 2° 3
164 125 109 116 130 107	0.25 0.11 0.26 0.38 0.16 0.29	1.09 0.34 0.02 0.07 0.20 0.13	0.74 0.31 0.58 0.09 0.47 0.76	1·29 5·55 6·33 4·82 7·07 11·31	0.35	9.81 0.48 0.58 0.44 0.83 1.15	0.79 0.55 0.46 0.36 0.56 0.58	10.41 6.15 9.37	30.43 19.05 15.77 15.55 18.42 30.63	17.02 14.43 16.45 16.25	18.09 15.10 15.95	31.18 20.72 20.69 16.99 18.94 25.84	40:70 19:07 18:43 17:28 17:78 23:18	34·12 19·94 19·56 17·12 18·40 24·49	4 5 6 7 8
117 112 127 118 125	0.88 0.51 0.62 0.97 1.23	0.04 0.13 0.01 0.02 0.19	0.38 0.28 0.24 0.27 0.17	4·11 2·87	1·23 0·65 0·96 0·60 0·90	1.29 0.61 0.78 0.53 0.78	0.26 0.27 0.28 0.41 0.45	9:44 9:40 12:00	16.94 17.24 18.75	15 [.] 42 16 [.] 64	15·94 16·39		17:41 19:24 15:21 17:54 13:78	18·25 '19·91 16·03 18·06 14·52	10 11 12 13 14
114 121 107 119 121	0.40 0.44 0.71	0.06 0.34 0.01 	0.38	4·20 17·90 11·68		0.85 1.66 0.94 0.59 0.69	0·20 0·40 0·47 0·51 0·27	12·52 5·56 5·92	21.00 26.56 19.68	15:03 19:92 26:55 19:35 18:97	20·50 26·55 19·53	14·21 16·27 21·35 19·09 17·79	14.16 15.74 21.43 18.48 16.04	14·19 16·02 21·39 18·81 16·94	15 · 16 17 18 19
97 102 103 98	0·37 0·15 0·71 0·44	0.28 0.08 0.12	0·32 0·39 0·56 0·50	12·35 12·22 4·67 11·13	0.80 0.28	0.25 0.47 1.01 0.87	0·21 0·52 0·35 0·40		19:35	24:41 26:07 18:71 24:01	24·45 26·90 19·03 24·65	22:98 28:92 18:97 23:53	21.65 27.16 17.33 21.95	22:30 28:03 18:15 22:71	20 21 22 23
114 100 95 101 111	1.21 0.50 2.16 0.74 0.93	0·10 0·04 0·26 0·48	2·28 0·42 1·25 1·23 ·43	13·30 4·29 4·10	1.19	4·48 0·60 0·31 0·68 0·53	0·33 0·43 0·57 0·48 0·35	20.61 11.97 12.29		35.66 21.30 19.60	36·34 36·15 21·78 20·36 22·20	34·64 33·42 19·31 17·31 23·90	33·10 31·56 16·71 16·04 22·26	33.89 32.48 17.95 16.66 23.08	24 25 26 27 28
99 96 97	0·03 0·87 0·30	0.24 0.31 0.42	0·29 0·87 0·09		0·94 0·45 0·34	0·46 0·29 0·42	0.77 0.52 0.35		25.57		26.18 24.82 23.67	24·16 20·79 23·92	21.20 18.62 21.01	22·80 19·65 22·34	29 30 31
112	0.67	0.26	0.46	7.10	0.86	1'13	0.40	10.40	21.90	20'63	21.58	20.95	19.67	20*33	

Supplementary Annual Statement II (a)—Provincial—Showing (I—XII) for the

. 1		2	3		4	
		Area in square	Average	Population	according to cens	sus of 1921.
Areas.		miles.	population per square mile.	Male.	Female.	Total.
The Contract Almoh Die	triat	80	29.88	1,247	1,143	2,39 0
Pyinwa Circle of Akyab Dis		1,500	13.94	10,790	10,124	20,914
Hill District of Arakan	•••	2,666	18.90	26,811	23,568	50,379
* Salween District	•••			901	513	1,414
Papun Town Chin Hills District	• • •	8,000	13.76	54,122	55,957	110,079
Chin Hills District Pakôkku Hill Tracts	•••	3,100	6:47	9,840	10,203	20,043
* Bhamo District	•••	6,903	16:36	56,888	56,072	112,960
Bhamo Town	•••	0,903		4,933	2,808	7,741
* Myitkyina District	***	11,847	11.68	73,760	64,641	138,401
Myitkyina Town	•••			3,107	1,849	4,956
* Katha District	***	7,721	30.27	118,103	115,603	233,706
Katha Town	•••	7,721	30 21	2,583	1,870	4,453
* Upper Chindwin Distric	···	14,525	12.25	90,182	87,701	177,883
Mawlaik Town				1,672	743	2,415
• Northern Shan States	•••	20,156	27.74	285,700	273,523	559,223
Lashio Town	• • •			2,046	1,402	3,448
* Southern Shan States	•••	40,437	22.24	458,193	453,275	911,468
Taunggyi Town	• • •			3,397	2,794	6,191
To the or Decision	•••	•••	•••	552	446	998
Kalaw Town	•••	•••	•••	1,822	1,175	2,997
Maiaw Town	•••		•••	1,022	1,175	2,77
						_
		4				
				-		0
Total	•••	116,935	19.99	1,185,636	1,151,810	2,337,446

^{*} Includes

births and deaths in areas not included in the main statements year 1928. (Paragraph 7.)

		5		6		7		8	
	Numbe	er of births reg	gistered.	Birth-rate	Numbe	er of deaths re	gistered.	Death-rate	arks.
	Male.	Female.	Total.	per 1,000 of population.	Male.	Female.	Total.	per 1,000 of population.	Remarks.
-									
	12	12	24	10.04	15	4	19	7.95	
	141	111	252	12.05	197	136	333	15.92	
	488	459	947	18.80	479	. 420	899	17:84	i i
	18	16	34	24.05	17	26	43	30.41	,
	2,208	2,868	5,076	46.11	1,631	1,514	3,145	28:57	* *
	76	81	1 57	7.83	262	192	454	22.65	
	1,900	1,739	3,639	32.21	2,021	1,795	3,816	33.78	
	116	100	216	27.90	157	89	246	31.78	•
	1,468	1,425	2,893	20.90	2,130	1,787	3,917	28:30	
	111	• 111	222	44.79	191	80	. 271	54.68	
	2,752	2,684	5,436	23.26	2,445	2,230	4,675	20.00	
	76	71	147	33:01	· 149	90	239	53.67	
	3,054	2,798	5,852	32.90	2,914	2,666	5,580	31:37	
	17	25	42	17:39	2 6	17	43	17:81	,
	6,886	6,488	13,374	23.92	6,088	4,799	10,887	19:47	
	83	76	159	46.11	129	64	193	55.97	
	6,325	6,182	12,507	13.72	6,549	6,482	13,031	14.30	,
	128	105	233	37.64	60	71	131	21.16	
	26	26	52	52.10	32	20	52	52.10	
	27	14	41	13.68	58	24	82	27.36	
					4.1				
									•
								,	
					= 1				Victor
			P						
	2 5,310	24,847	50,157	21.46	24,731	22,025	46,756	20.00	

Town.

Annual Statement No. III.—Deaths registered in the Districts of

	2	•						
1	2			1	1	·	1	
No.	Divisions and	Districts.		January.	February.	March.	April.	May.
	ARAKAN D	IVISION.						
1 .2 .3	Akyab Kyaukpyu Sandoway PEGU DIV	 VISION.	•••	. 964 269 294	855 154 - 131	1,108 148 149	1,098 267 159	1,170 186 116
4 5 6 .7 8 9	Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	•••	•••	950 579 705 463 448 845	1,032 615 552 347 388 676	1,112 817 606 323 311 648	960 617 441 633 390 603	880 611 628 537 471 556
10 11 12 13 14	IRRAWADDY Bassein Henzada Myaungmya Ma-ubin Pyapôn	•••		546 831 540 490 392	428 567 349 447 455	533 570 396 412 440	770 • 553 596 571 615	783 686 405 403 452
15 16 17 18 19	TENASSERIM Thatôn Amherst Tavoy Mergui Toungoo	•••		793 497 193 164 590	770 443 272 118 493	672 701 332 190 652	410 699 239 99 444	458 662 425 220 418
20 21 22 23	Magwe D Thayetmyo Minbu Magwe Pakôkku	OIVISION.	•••	631 899 622 1,050	383 484 688 818	565 477 532 828	309 523 744 1,022	406 389 467 730
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan Yamèthin	•••	···	1,193 491 871 1,028 603	1,239 320 462 696 400	966 480 305 462 564	818 3 6 3 435 668 511	682 242 424 422 493
29 30 31	Shwebo Sagaing Lower Chindwin	 	·	782 \$50 682	590 747 495	638 650 564	679 533 556	638 448 513
		Total		20,255	16,414	17,151	17,325	15,921
	Ratio of deaths month.	per 1,000 in	each	1.87	1.25	1.28	1.60	1.47

Burma during each month of the year 1928.

	3								4	
	June.	July.	August.	September.	Octob	er.	November.	December.	Total deaths registered during the year.	No.
				,						
	1,2 2 3 186 162	955 385 214	791 288 250	1,051 270 250	5	825 224 302	698 232 13 0	1,097 185 156	11,835 2,794 2,313	1 2 3
	1,058 910 636 459 325 904	1,032 739 689 570 622 1,251	1, 0 11 610 628 473 557 1,615	889 688 648 486 296 1,061		946 603 573 595 433 910	883 514 687 481 472 774	937 759 642 450 328 975	11,690 8,062 7,435 5,817 5,041 10,818	4 5 6 7 8 9
	581 654 478 510 381	690 647 363 586 259	754 745 534 425 393	737 595 503 415 449	1.	779 ,071 622 540 498	628 857 528 603 492	. 692 1,003 759 447 546	7,921 8,779 6,073 5,849 5,372	10 11 12 13 14
	586 710 435 312 543	771 902 365 280 890	665 943 363 286 637	556 857 325 236 797		465 911 382 230 701	501 663 331 202 755	581 578 501 308 797	•7,228 8,566 4,163 2,645 7,717	15 16 17 18 19
	769 434 550 681	302 595 767 860	. 419 665 546 825	727 570 856 1,047	1	328 739 683 ,324	359 752 767 1,295	1,046 851 833 999	6,244 7,378 8,055 11,479	20 21 22 23
	858 253 473 339 490	827 421 586 1,147 511	1,017 346 692 841 580	911 313 602 758 560		,311 592 679 ,114 804	1,540 669 536 812 935	1,597 668 249 712 724	12,959 5,158 6,314 8,999 7,175	24 25 26 27 28
	896 470 593	864 562 689	878 604 588	783 619 815		958 737 910	1,032 935 888	1,210 959 1,088	9,948 8,114 8,381	29 30 31
	17,859	. 20,341	19,969	19,670	21.	,789	20,951	22,677	230,322	
	1.65	1.88	1.85	1.82		2.01	1.94	2.10	21.58	
,	1.65	1.88	1.85	1.82	·					

Annual Statement No. IV.—Deaths registered according to Age

1		2	1	3		4		5		, 6	
-		•	-	Under 1	year.	1 year unde		5 and u	nder 10.	10 and 1	inder 15.
No.	Divisio	ns and Districts.		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females
	Δυλκα	An Division.									
		, Diviole III		1,120	976	777	813	475	411	231	209
1 2	Akyab Kyaukpyu	•••	•••	291 508	279 389	120 89	117 87	84 56	102	46	33 29
3	Sandoway	•••	•••	308	309	0,9	07				
	PEG	U DIVISION.					T02	170	162	140	122
4 5	Rangoon Pegu	•••	•••	1,362 1,220	1,168 1,058	576 418	582 408	1 76 196	163 200	140 162	135
6	Tharrawado	iy ···	•••	1,122	950 786	386 357	489 326	204 144	215 118	142	137 80
7 8	Hanthawad Insein	•••	•••	671	538	326	294	143	128	97	67 182
9	Prome	•••	•••	1,896	1,607	709	722	271	254	165	102
	IRRAWA	ADDY DIVISION.							,		:
10	Bassein	•••	•••	1,003	896	408 472	394 439	210 224	204 186	175 150	147 111
11 12	Henzada Myaungmy	••• a •••	•••	1,519 888	1,238 719	381	365	144	146	93	76
13	Ma-ubin	•••	•••	890	717 572	376 283	346 314	130 153	129 145	110 105	69 8 0
14	Pyapôn	•••	•••	662	3/2	203	JIT	130	1 10		
	TENASS	ERIM DIVISION.									
15	Thatôn	•••	•••	787 1, I 57	594 988	387 548	368 486	162 248	180 228	144 151	142 108
16 17	Amherst Tavoy	•••	•••	552	441	318	313	119	127	71 42	6 0 24
18	Mergui	•••	•••	326 876	256 778	163 429	178 399	93 232	91 215	190	197
19	Toungoo		•••							- 1	
	MAG	WE DIVISION.		1107	777	383	438	191	181	94	10 6
20 21	Thayetmyo Minbu	•••	•••	806 995	777 873	526	537	206	187	110	84
2 1 2 2	Magwe	•••	•••	964	886 1,163	487 1,024	460 1,000	273 328	255 38 8	229 215	196 228
23	Pakôkku	•••	•••	1,319	1,103	1,024	1,000	020		1111	
	MANDA	ALAY DIVISION.							0.45	170	200
24	Mandalay	•••	•••	2,256	1,808 724	714	720	309	347 151	172 88	2 0 9 58
25 26	Kyauksè Meiktila	•••	•••	623	603	548	569	114	98	67	88
27	Myingyan	•••	•••	913	763 952	843 525	773 529	259 212	260 265	165 95	145 110
28	Yamèthin	Division	•••	1,105	/52	323		- 9			1
20		AING DIVISION.	•••	1.779	1,530	666	642	275	253	125	131
29 30	Shwebo Sagaing	•••	•••	1,060	969	587	563 616	225 254	219 233	109 147	128 143
31	Lower Chi	ndwin	• • •	1,193	1,111	619		-			
		Total, Deaths	•••	31,534		14,779		6,260	6,133	3,980	3,634
	Tot	tal, Population	•••	131,269	136,391	534,388	554,521	665,315	673,733	648,260	609,818
	Total Ratio	per 1,000 living	•••	240.22	198.76	27.66	26.37	9.41	9.10	6.14	5.96
	1			•							

n the Districts of Burma during the year 1928. (Paragraph 18.)

	7		8		9		10		11		12	1
15 and	under 20.	20 and	l under 30.	30 and	under 40.	40 and	under 50.	50 and	under 60.	60 and	upwards.	
Males.	Females.	Males.	Females	Males.	Femaies.	Males.	Females.	Males.	Females	. Males.	Females,	No:
342	317	664	743	740	513	671	390	534	361	842	706	1 2 3
43	61	104	149	116	113	110	89	154	115	346	322	
44	34	75	81	76	92	89	83	79	72	169	176	
262	154	1,133	538	1,277	458	837	290	646	278	855	673	4
213	178	506	350	489	329	475	257	283	232	520	433	5
161	167	384	337	371	305	314	237	299	245	500	470	6
102	112	225	254	288	264	266	172	291	211	520	368	7
144	105	304	237	304	226	262	169	224	141	376	285	8
223	235	444	465	498	469	437	356	373	366	583	563	9
233	217	463	377	461	387	413	282	372	265	539	475	10
160	132	341	409	374	373	392	304	345	321	655	634	11
137	127	376	294	381	259	305	195	262	164	426	335	12
125	103	338	276	281	249	234	2 11	153	154	523	435	13
182	- 135	389	284	388	262	250	193	230	158	341	246	14
172	190	221	282	33 7	257	417	352	509	439	708	580	15
184	179	482	452	499	390	369	267	335	247	713	530	16
62	72	151	220	192	198	173	127	169	132	344	322	17
46	33	119	109	158	128	156	81	116	83	216	227,	18+
261	210	525	456	530	375	378	300	314	208	484	360	19
98	99	227	281	254	280	260	209	271	278	484	527	20
144	117	260	324	283	280	269	253	304	263	636	727	21
234	196	325	366	333	327	272	272	295	249	684	752	22
224	235	392	460	403	459	446	366	428	445	893	1,063	23
193	221	680	530	625	467	486	365	526	415	930	986	24
89	87	170	231	186	189	192	157	193	201	383	440	25
103	129	299	309	262	273	212	186	227	188	615	801	26
190	215	361	445	370	349	296	248	309	291	810	994	27
130	92	300	327	314	254	236	171	274	166	516	542	28
139	172	283	333	282	311	210	237	250	296	935	1,099	29
134	131	305	324	276	315	225	227	231	273	812	1,001	30
164	163	275	313	262	249	238	238	198	240	767	958	31
4,938	4,618	11,121	10,556	11,610	9,400	9,890	7,284	9,194	7,497	18,130	18,030	
543,201	566,316	986,827	926,484	805,282	653,264	570,043	499,720	347,411	344,624	313,209	312,542	
9.09	8·15	11.27	11:39	14:42	14:39	17:35	14.28	26.46	21.75	57:83	57.09	

SUPPLEMENTARY ANNUAL STATEMENT No. IV (a) giving the Details

1				Not exc	ceeding one n	nonth.		
No.	Division and District.		Male.			Female.		Total of
Zio.		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	columns 5 and 8.
(1)	. (2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Arakan Division.							•
1 2 3	Akyab Kyaukpyu Sandoway	65 35 59	130 29 88	195 64 147	82 30 40	115 37 65	197 67 105	392 131 252
4 5 6 7 8 9	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	102 103 167	136 138 123 95 105 256	461 240 226 262 175 407	277 73 61 141 61 121	122 89 98 138 77 231	399 162 159 279 138 352	860 402 385 541 313 759
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	107	110 179 103 137 99	243 333 230 244 205	115 117 93 95 98	90 126 93 96 79	205 243 186 191 177	448 576 416 435 382
15 16 17 18 19	Tenasserim Division. Thatôn Amherst Tavoy Mergui Toungoo	129 60 48	186 178 101 54 162	297 307 161 102 230		118 139 65 44 144	220 241 111 85 197	517 548 272 187 427
20 21 22 23	Magwe Division. Thayetmyo Minbu Magwe Pakôkku	130 122 250	81 112 131 283	123 242 253 542	106 102	92 122 125 232	141 228 227 463	264 470 480 1,005
24 25 26 27 28	Mandalay Mandalay Kyauksè Meiktila Myingyan Yamèthin	135 60 132	293 140 48 130 108	275 108 262	124 56 89	232 118 48 103 91	581 242 104 192 160	1,394 517 212 454 398
29 30 31	Shwebo Sagaing Lower Chindwin	170	226 152 231	492 322 450	194 132 187	206 - 126 203	4 0 0 258 390	892 580 840
	Total	4,305	4,344	8,649	3,436	3,664	7,100	15,749

of Deaths by Ages under One year during the year 1928. (Paragraph 18.)

Over o	one month ar ding six mon	nd not aths.		ix months an		Total male, columns 5, 10 and 13.	Total female, columns 8, 11 and 14.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.	20 10121			
(10)	. (11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(1)
633	-509	1,142	2 92	270	562	1,120	976	2,096	1 2 3
153	142	295	74	70	144	291	279	570	
300	231	531	61	53	114	508	389	897	
648	541	1,189	253	228	481	1,362	1,168	2,530	4
791	691	1,482	189	205	394	1,220	1,058	2,278	5
690	598	1,288	206	193	399	1,122	950	2,072	6
401	363	764	151	144	295	814	786	1,600	7
370	280	650	126	120	246	671	538	1,209	8
11,194	964	2,158	295	291	586	1,896	1,607	3,503	9
546	508	1,054	214	183	397	1,003	896	1,899	10
930	763	1,693	256	232	488	1,519	1,238	2,757	11
542	449	991	116	84	200	888	719	1,607	12
511	379	890	135	147	282	890	717	1,607	13
336	310	646	121	85	206	662	572	1,234	14
317 604 308 187 453	228 530 249 134 406	545 1,134 557 321 859	173 246 83 37 193	146 217 81 37 175	319 463 164 74 368	787 1,157 552 326 876	594 988 441 256 778	1,381 2,145 993 582 1,654	15 16 · 17 18 19
536	497	1,033	147	139	286	806	777	1,583	20
556	451	1,007	197	194	391	9 95	873	1,868	21
475	429	904	236	230	466	964	886	1,850	22
469	411	880	308	289	597	1,3 19	1,163	2,482	23
1,101	944	2,045	342	283	625	2,256	1,808	4,064	24
369	351	720	153	131	284	797	724	1,521	25
373	366	739	142	133	275	623	603	1,226	26
415	364	7 79	236	207	443	913	763	1,676	27
754	625	1,379	173	167	340	1,165	952	2,117	28
983	816	1,799	304	314	618	1,779	1,530	3,309	29
523	503	1,031	215	203	418	1,060	969	2,029	30
456	458	914	287	263	550	1,193	1,111	2,304	31
16,924	14,495	31,419	5,961	5,514	11,475	31,534	27,109	58,643	1

ANNUAL STATEMENT No. V.—Deaths registered according

1	2			3		•	
				Population (Census 1921) .	-	
No.	Divisions and Districts.	Christians.	Mahome- dans.	Hindus.	Burmese or Buddhists.	Other classes.	Total.
	ARAKAN DIVISION.					•	
1 2 3	Sandoway	. 618 . 136 . 956	4,479	14,719 634 376	315,137 178,451 100,878	34,605 16,173 4,568	574,040 · 199,873 · 112,029 · .
	PEGU DIVISION.			. 05 (00)		10.100	
4 5 6 7 8 9	Pegu	25,310 9,790 8,074 5,074 15,544 1,238	9,745 5,421 12,811 7,874	125,626 40,856 9,179 - 47,326 24,034 5,509	114,319 378,338 467,558 293,768 238,733 356,283	18,180 6,891 2,197 5,645 3,355 4,371	345,505 445,620 492,429 364,624 289,540 371,575
	JRRAWADDY DIVISION				400 546	0.07/	400.453
10 11 12 13 14	Henzada ' Myaungmya Ma-ubin	32,630 11,742 21,198 11,984 9,054	5,211 11,451 6,001	14,947 6,703 9,533 6,833 16,431	428,546 525,231 324,315 302,862 254,072	3,356 2,033 4,054 2,426 3,797	489,473 550,920 370,551 330,106 288,994
	TENASSERIM DIVISION	v.					l.
15 16 17 18 19	Amherst Tavoy Mergui	3,811 7,074 2,645 6,153 35,442	26,678 2,873 11,645	21,112 25,415 3,319 6,613 19,575		2,443 3,568 2,803 6,437 20,723	471,100 417,910 156,786 135,465 381,883
	MAGWE DIVISION.		8				1
20 21 22 23	Minbu Magwe	465 174 1,153 307	1,223 3,521	1,946 1,995 7,243 842	265,885	11,275 5,025 787 3,442	255,406 274,302 423,252 465,771
	MANDALAY DIVISION					•	
24 25 26 27 28	Kyauksè Meiktila Myingyan	8,329 592 772 342 2,416	5,740 4,283 1,156	22,061; 1,028 2,644; 1,724 6,220	135,082 4 281,618	3,695 235 580 412 3,080	356,621 142,67 7 289,897 442,008 323,189
	SAGAING DIVISION.						(2)
29 30 31	Sagaing	2,008 948 334	3 2,811	2,525 1,956 1,312	367,216 321,016 351,313	664 177 157	380,016 326,908 354,148
	Total	226,313	3 488,349	450,236	9,480,566	177,154	10,822,618

o classes in the Districts of Burma during the year 1928.

			4						5			1
	Nur	mber of do	eaths regist	ered.	1).		Ratio of	deaths pe	r 1,000 of p	opulation	1.	
Chris- tians.	· Maho- medans.	Hindus.	Burmese or Buddhists	Other classes.	Total.	Chris- tians.	Maho- medans:	Hindus.	Burmese or Buddhists		Total.	No.
		Page						r	•			
1	4,307	146	6,936	445	11,835	1.62	20.61	9·92	22·01	12.86	20 ⁻ 62	1
3	52	3	2,518	218	2,794	22.06	11.61	4·73	14·11	13.48	13 ⁻ 98	2
16	95	2	2,103	97	2,313	16.74	18.09	5·32	20·85	21.23	20 ⁻ 65	3
609	1,739	4,168	4,941	233	11,690	24·06	28.02	33·18	43·22	12.82	33.83	4
148	181	390	6,816	527	8,062	15·12	18.57	9·55	18·02	76.48	18.09	5
76	111	208	6,905	135	7,435	9·41	20.48	22·66	14·77	61.45	15.10	6
52	188	-361	4,894	322	5,817	10·25	14.67	7·63	16·66	57.04	15.95	7
209	150	366	4,123	193	5,041	13·45	19.05	15·23	17·27	57.53	17.41	8
10	105	289	10,296	118	10,818	8·08	25.16	52·46	28·90	27.00	29.11	9
324	295	471	6,786	45	7,921	9·93	29·52	31·51	15.83	13.41	16·18	10
154	118	174	8,257	76	8,779	13·12	22·64	25·96	15.72	37.38	15·94	11
295	161	190	5,264	163	6,073	13·92	14·06	19·93	16.23	40.21	16·39	12
90	83	120	5,468	88	5,849	7·51	13·83	17·56	18.05	36.27	17·72	13
178	162	156	4,475	401	5,372	19·66	28·72	9·49	17.61	105.61	18·59	14
42	238	318	6,549	81	7,228	11.02	17·75	15.06	15.22	33.16	15.34	15
129	713	640	7,006	78	8,566	18.24	26·73	25.18	19.73	21.86	20.50	16
45	78	98	3,779	163	4,163	17.01	27·15	29.53	26.04	58.15	26.55	17
115	262	137	2,072	59	2,645	18.69	22·50	20.72	19.81	9.17	19.53	18
479	227	350	6,243	418	7,717	13.52	27·81	17.88	20.95	20.17	20.21	19
11	74	55	5,851	253	6,244	23.66	37·11	28·26	24·41	22 ⁻ 44	24·45	20
6	28	28	7,252	64	7,378	34.48	22·89	14·04	27·27	12 ⁻ 74	26·90	21
10	64	68	7,869	44	8,955	8.67	18·18	19·39	19·17	55 ⁻ 91	19·03	22
4	28	14	11,430	3	11,479	13.03	27·40	16·63	24·84	-87	24·65	23
188	806	717	11,075	173	12,959	22·57	34·73	32·50	37.00	46.82	36·34	24
20	145	47	4,932	14	5,158	33·78	25·26	45·72	36.51	59.57	36·15	25
10	124	43	6,133	4	6,314	12·95	28·95	16·26	21.78	6.90	21·78	26
2	37	15	8,934	11	8,999	5·85	32·01	8·70	20.38	26.70	20·36	27
34	411	217	6,453	60	7,175	14·07	31·84	34·89	21.61	19.48	22·20	28
35	89	89	9,700	2	9,948	17·43	16.05	35·25	26·41	3·01	26·18	29
1		52	7,968	4	8,114	1·05	31.66	26·58	24·82	22·60	24·82	30
3		16	8,333	10	8,381	8·98	18.41	12·20	23·72	63·69	23·67	31
3,299	11,212	9,948	201,361	4,502	230,322	14.28	22.96	22.10	21.24	25.41	21.28	

SUPPLEMENTARY ANNUAL STATEMENT V-A.—Deaths registered according in the Towns

-	2	1				3	J			
-					Po	pulation (C	Census 1921)			
	1.70		Christi	ans.	Mahom	edans.	Hind	us.	Burme Buddl	
No.	Divisions and District	S.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
	Arakan Division	J.					•			
1 2 3	Akyab Kyaukpyu Sandoway	•••	428 65 488	190 71 468	116,736 2,580 2,749	92,225 1,899 2,502	13,401 609 331	1,318 25 45	159,719 84,901 49,415	155,418: 93,550 51,463
4 5 6 7 8 9	PEGU DIVISION. Rangoon Pegu ••• Tharrawaddy Hanthawaddy Insein ••• Prome	•••	14,215 4,918 3,970 3,022 7,681 651	11,095 4,872 4,104 2,052 7,863 587	49,610 6,996 3,736 9,551 5,301 2,687	12,460 2,749 1,685 3,260 2,573 1,487	102,798 27,554 7,422 35,365 18,387 4,427	22,828 13,302 1,757 11,961 5,647 1,082	59,517 191,186 229,477 148,757 120,939 172,327	54,802° 187,152 238,081 145,011 117,794 183,956
11 12 13 14	IRRAWADDY DIVIS Bassein Henzada Myaungmya Ma-ubin Pyapôn	•••	16,207 5,711 10,645 5,976 4,925	16,423 6,031 10,553 6,008 4,129	7,082 3,323 8,990 4,350 4,843	2,912 1,888 2,461 1,651 797	13,151 5,712 8,544 5,954 12,804	1,796 991 989 879 3,627	213,811 257,027 165,260 150,413 131,225	214,735 268,204 159,055 152,449 122,847
15 16 17 18 19	Tenasserim Division Thatôn Amherst Tavoy Mergui Toungoo	ON.	1,920 3,596 1,371 3,297 17,624	1,891 3,478 1,274 2,856 17,818	8,912 16,261 1,844 6,270 5,498	4,493 10,417 1,029 15,375 2,665	14,794 19,468 2,953 5,842 13,316	6,318 5,947 366 771 6,259	218,580 181,489 72,612 53,200 149,783	211,749 173,686 72,534 51,417 148,197
20 21 22 23	MAGWE DIVISIO Thayetmyo Minbu Magwe Pakôkku	N.	261 118 746 210	204 56 407 97	1,177 842 2,748 701	817 381 773 321	1,405 1,752 6,669 702	541 243 574 140	116,712 129,039 200,865 220,495	123,014 136,846 209,683 239,663
24 25 26 27 28	Mandalay Mandalay Kyauskè Meiktila Myingyan Yamèthin	•••	4,506 292 532 202 1,285	3,823 300 240 140 1,131	13,665 2,896 2,369 833 6,896	9,544 2,844 1,914 323 6,012	15,591 821 2,005 1,399 4,797	6,470 207 639 325 1,423	146,205 66,277 132,184 210,540 146,086	153,122 68,805 149,434 227,834 152,479
29 30 31	SAGAING DIVISIO Shwebo Sagaing Lower Chindwin	N.	1,015 446 194	993 502 140	3,915 1,563 801	3,688 1,248 231	1,912 1,382 1,019	-613 574 293	172,142 151,524 159,762	195, 074 169,49 2 191,5 51
	Total _.	•••	116,517	109,796	305,725	182,624	352,286	97,950	4,661,469	4 819,097

to Sex in the four main classes in the Districts of Burma during the year 1928.

			4								5			sm G		1
		Numbe	r of dea	ths regis	stered.				Ratio	of dea	ths per	1,000 of	populat	ion.		
Christ	ians.	Mahom	nedans.	Hino	lus.	Burme Buddl		Christ	ians.	Mahom	edans.	Hin	dus.	Burm Budd	ese or	No .
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
				-												
2 9	1 1 7	2,411 30 46	1,896 22 49	123 3 1	23			30.77	14.08	20.65 11.63 16.73	11.59	4.93	•••	22.63 14.78 22.46	13.20	2
349 82 39 24 118 6	260 66 37 28 91 4	1,197 121 75 122 98 76	60 36 66 52	305 156 248 242	85 52 113 124	3,604 3,525 2,518 2,257	3,212 3,380 2,376	16.67 9.82 7.94 15.36	13.55 9.02 13.65 11.57	17.30 20.07 12.77 18.49	21.83 21.36 20.25 20.21	11.07 21.02 7.01 13.16	6.39 29.60 9.45 21.96	43.68 18.85 15.36 16.93 18.66 30.29	17.16 14.20 16.38 15.84	5 6 7 8
162 79 146 51 105	162 75 149 39 73	188 77 130 59 137	41 31 24	127 163 98	47 27 22	4,298 2,833 2,878	3,959 2,431 2,590	13.72 8.53	12.44 14.12 6.49	23·17 14·46 13·56	21.72 12.60 14.54	22.23 19.08 16.46	47.43 27.30 25.03	16.51 16.72 17.14 19.13 17.57	14.76 15.28 16.99	11 12 13
20 65 24 55 231	22 64 21 60 248	147 441 57 135 135	272 21 127	426 77 95	214 21 42	3,710 1,888 1,107	3,296 1,891 965	18.08 17.51 16.68	18.40 16.48 21.01	27·12 30·91 21·53	26.11 20.41 23.63	21.88 26.08 16.26	35.98 57.38 54.47	15.70 20.44 26.00 20.81 22.25	18.98 26.07 18.77	16 17 18
4 5 5 1	7 1 5 3	43 18 47 19	10	22 53	6 15	3,650 3,957	3,602	42.37	17.86 12.29	21.38	26·25 21·99	12.56 7.95	24.69	24.62 28.29 19.70 25.58	26 ³²	21 22
104 12 7 2 19	84 8 3 15	471 89 63 22 240	56 61 15	26 30 12	21 13 3	2,452 2,968 4,472	2,480 3,165 4,462	41.10	26.67 12.50	30·73 26·59 26·41	19 [.] 69 31 [.] 87 46 [.] 44	31.67 14.96 8.58	101'45 20'34 9'23		36.04	25 26 27
19 2	16 1 1	70 45 13	44		14	3,879	4,089		1.99	28.79	35.26	27.50	24.39	27·89 25·60 25·54	24.13	30
1,747	1,552	6,822	4,390	7,095	2,853	102,816	98,545	14'99	14'14	22.31	24'04	20'14	29'13	22.06	20.45	

ANNUAL STATEMENT No. VI-A.—Births and Deaths registered from (Paragraphs 9, 11, 16,

					-				arag.	tapns		, 10,
1	2	, 3		4			5.	6.	7 .	8.	9_	10
1			1.2	Births.					- 4			
No.	Divisions and Districts.	Population (Census 1921).	Male.	Female.	Total.	Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhea.	Respiratory Diseases.
	ARAKAN DIVISION.		₩ e	-	-				•	b +		
1 2 3	Akyab Kyaukpyu Sandoway PEGU DIVISION.	535,148 195,989 108,267		5,852 1,411 1,977	12,408 3,001 3,987	15.31	169	460 1 6	•••	6,539 1,387 982	536 54 63	392 22 47
4 5 6 7 8	Pegu Tharrawaddy Hanthawaddy Insein Prome	419,355 449,000 340,935 254,031 322,246	4,745 4,091 2,632	3,837 4,532 3,886 2,505 6,240	7,935 9,277 7,977 5,137 12,716	23·40 20·22	44	116 4 21 54 15	33 41 17 136 44	2,049 2,822 1,633 1,769 3,974	115 93	43 117 95 24 63
9 10 11 012 13	IRRAWADDY DIVISION. Bassein Henzada Myaungmya Ma-ubin Pyapôn	434,904 512,412 349,709 305,938 271,661	6,285 3,983	4,257 5,844 3,756 3,631 2,912	12,129 7,739 7,528	20·50 23·67 22·13 24·61 21·83	165 121 202	19 40 2 21 43	46 14 25 13 23	2,232 2,059 1,395 886 1,458	281 278 147	207 152 63 85 117
14 15 16 17 18	Tenasserim Division. Thatôn Amherst Tavoy Mergui Toungoo MAGWE DIVISION.	448,841 350,022 129,306 117,057 350,117	6,593 2,976 1,991	3,574 6,204 2,874 1,914 3,323	12,797 5,850 3,905	16.78 36.56 45.24 33.36 19.64	131	30 37 1 378	38	2,999 1,499 2,383 1,208 3,058	263 218 89	209 266 92 40 18
19 20 21 22	Thayetmyo Minbu Magwe Pakôkku	233,419 262,065 393,995 446,264	3,875 4,289	3,225 3,533 4,275 6,495	7,408	27·73 28·27 21·74 29·40	41 213	74 29 56	8 57 95 28	2,984 3,1 8 8 1, 7 13 5,075	191 176	26 64 126 149
23 24 25 26 27	Mandalay Mandalay Kyauksè Meiktila, Myingyan Yamèthin	187,707 136,570 281,029 415,983 294,730	2,905 3,223 4,140	2,584 2,910 3,122 4,230 4,003	5,255 5,815 6,345 8,370 8,021	42.58 22.58 20.12	67 614	7 8 100 87	28 23 341 351 69	1,704 1,873 1,194 1,672 2,028	34 304 226	11 12 24 41 10
28 29 30	SAGAING DIVISION. Shwebo Sagaing Lower Chindwin	366,669 310,696 344,923	4,549 5,400	6,031 4,478 5,382	12,328 9,027 10,782	29.05 31.26	221 81	86 100 146	72 230 14	3,648 1,753 3,119	131 108	94 54 47
	Total, Rural Districts, Burma.	9,568,988	124,347	118,797	243.144	25*41.	5,718	1,941	1,746	7 0,2 83	6,102	2,710

different causes in the Rural Districts of Burma during the year 1928. 22, 25, 29, 32, 34 and 35.)

1	~		ndry-randeds	-11			12	13				•	1	4 ,				3	T
			· I	njuries.		e	ý	ui o			Rati	o of Dea	ths pe	er 1;000	of po	pulatio	n,	1	1
	Suid	1	iding or	Snake-bite or killed by wild beasts.		7	All other causes.	Total deaths from all causes.	5	pox.			ery and	ratory es.	es.	ler.	cat	m all ises.	
	Male.	Female.	Wounding accident.	Snake killed beasts.	Rabies.	Total.	All of	Total all can	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhæa.	Respiratory Diseases.	Injuries.	All other causes.	For the year.	Mean of previous	No
1.0					,	~	4		1	, -								,	
	2 1 5	, 1	59 10 34	8 11 7	6	22	1,559 1,056 1,069		0.86	0.01		12 [.] 22 7 [.] 08 9 [.] 07	1:00 0:28 0:58	0.11	0·15 0·11 0·43	5.39	13.83	17.89 13.76 22.88	2
	- 7 4 9: 2. 5	3 5 7 3 3	56 85 32 55 40	73 103 40 34 91	1 5 12 10 3	202	2,313 3,110 1,740	6,503 5,873 5,225 3,964 8,676	0·24 0·39 0·17	0.01 0.06 0.21	0.09 0.05 0.54	6.29 4.79 6.96	0.59 0.34 0.37	0.28 0.28 0.09	0·33 0·45 0·29 0·41 0·44	5·15 9·12 6·85	15·51 13·08 15·33 15·60 26·92	17.82 16.59 17.86	5 6 7
	7 3 1 4	7 2 3 	23 33 17 39 71	37 54 37 51 34	6 8 3 18 3	100 - 58 -115	4,420 3,123 3,545	5,735 7,231 5,065 5,014 4,472	0.35 0.66	0.08 0.01 0.07	0.03 0.03	4·02 3·99 2·90	0.55 0.79 0.48	0.30 0.18 0.28	0°18 0°20 0°17 0°38 0°40	8.63 8.93 11.59	14 [.] 48 16 [.] 39	18.63	10 11 12
	3 5 2	1 2 1	21 71 34 30 35	34 38 6 24	9 3 4 1 4	116 45 40	3,972 489 535	6,153 6,284 3,228 1,912 5,436	0.37	0.01	•••	6.68 4.28 18.43 10.32 8.73	0.75 1.69 0.76	0.76 0.71 0.34	0.33 0.35 0.34	11·35 3·78 4·57	13·71 17·95 24·96 16·33 18·38	13·26 20·04 16·33	15 16 17
-	3 2	3 2 4 8	20 33 23 63	15 85 60 90	6 7 3 13	127 93	3,078 4,065	5,364 6,746 6,510 10,384	0.16	0.07	0.22	12·16 4·35	0.73	0·24 0·32	0.48	11.75	16.52	27.45	20
	1 3 2	1 1 6 2	11 29 32 23 38	18 23 83 156 26	1 3 10 5 6	. 59 126	2,769 3,321 4,966	4,374 4,837 5,932 7,784 5,950	0.49 2.18 0.57	0.03 0.24	0.17 1.21 0.84	13.71 4.25 4.02	0.25 1.08 0.54	0.09 0.09 0.10	0.43 0.45 0.46	12:04 20:28 11:82 11:94 11:29	35·42 21·11 18·71	31.99 17.31 15.59	25 26
	2 2 4 5	9 3 4	91 47 37	71 78 55	79 9 8	141	4,650	9,351 7,280 7,929	0.71	0.32	0.74	5.64	0.42	0.17	0.45	13·19 14·97 12·48	23.43	22·27 18·84 21·99	28 29 30
	102	85	1,192	1,442	246	3,067	88,514	180,081	0.60	C'20	0.18	7 34	0.64	0 28	0.32	9°25	18*82	,18*29	

Annual Statement No. VI-B.—Births and Deaths registered from different causes

							Ī	5	6	7	8	9	10
1	2	-	. 3		4	i			-	-			
No.	Divisions and Towns.		Population (Census 1921).	Male.	Eemale.	Total.	Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhæa.	Respiratory Diseases.
	ARAKAN DIVISION												4.00
1 2 3 4	Akyab Minbya Kyaukpyu Sandoway	•••	36,569 2,323 3,884 3,762	291 34 50 54	255 30 50 56	64 100		48 3	6	•••	156 34 30 24	28 11 . 4 	139· 2 7· 3·
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	PEGU DIVISION. Rangoon Pegu Nyaunglebin Tharrawaddy Thônzè Zigôn Letpadan Gyobingauk Minhla Nattalin Syriam Thôngwa Insein Thamaing Kamayut Thingangyun Kanbe Prome Shwedaung Paungdè	•••	345,505 18,769 7,496 3,625 6,594 6,916 9,901 7,666 3,829 4,898 15,193 8,496 14,308 4,109 6,483 5,389 5,220 26,067 9,108 14,154	365 84 76 150 76 113 83 49 61 164 139 161 35 48 56 63 379 100	328 86 50 140 82 102 69 32 63 158 116 149 42 43 58 74 329 108	158 215 152 81 124 322 255 310 77 91 114 137 708 208	36.92 22.68 34.76 43.98 22.85 21.71 19.83 21.15 25.32 21.19 30.01 21.67 18.74 14.04 21.15 26.25 3 27.16 22.84	2 1 18 1 3 2 78 2	378 34 1 1 6 4 10 23	257 56 50 12 41 66 37 35 44 9 17 1 132 65 40	22	3 4 43 13	3,389 116 53 16 44 68 4 5 43 22 94 27 14 41 39 215 25
25 26 27 28 29 30 31 32 33 34 35 36 37 38	Bassein Ngathainggyaung Kyônpyaw Henzada Myanaung Kyangin Myaungmya Wakèma Moulmeingyun Ma-ubin Yandoon Danubyu Pyapôn Kyaiklat	•••	42,563 5,122 6,884 23,651 7,793 7,064 6,280 8,447 6,115 6,812 9,344 8,012 8,109 9,224	63 79 368 120 107 104 135 100 119 148 91	73 74 330 128 112 84 121 77 92 103 67 78	136 153 698 248 219 188 256 177 21 25 15 17	5 26·52 3 22·23 8 29·51 8 31·82 9 31·00 8 29·94 6 30·31 7 28·95 1 30·97 1 26·86 8 19·72 5 21·58	3 6 109 5 26 16 66 35 47 36 47 36 68 60	25 6 2 1	13 16 8 54 1 27 36 14	15 5 86 52 35 15 52 60 9 38 15 82	11 11 32 20 26 20 24 34 6 19 26 58	29 26 151 9 24 108 56 62 36 20 33 86
39 40 41 42 43	Kyaikto Moulmein Kawkareik	ion.	15,091 7,168 61,301 6,587 27,480	8 101 833 161	90 3 798 1 153	19 1,63 31	1 26.65 1 26.65 4 4 7 .62	5 1 54 7	105	58 82 3	70	74 111 13	18 414 12

of Burma during the year 1928. (Paragraphs 9, 13, 17, 23, 26, 30, 32, 34 and 35.)

	ľ		11		1	12	13						14 ,				
	1	In	juries.							Ratio	of Dea	ths per :	1,000 of 1	populat	ion.		
Suid	ide.		killed s.			ŝ	rom all						seases.		્યું.	From	es.
Males.	Females.	Wounding or accident.	Snake-bite or k by wild beasts.	Rabies.	Total,	All other causes.	Total Deaths from all causes.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	For the year,	Mean of previ- ous five years.
•••	4	17 1 5	•••	3	24 1 5	436 13 41 46	843 69 83 78	1·31 1·29 	0.33 2.58	•••	4·27 14·64 7·72 6·38	0·77 4·74 1·03	3.80 0.86 1.80 0.80	0.66 0.26 1.33	5.60 10.56	29·70 21·37	26 ⁰ 99
60 2	1	8 6 3 1 277 3 3 3 3 3 4 3 2 6 3 \$ 3 \$ 3 \$ 3 \$ 3 \$ 3 \$ 3 \$ 3 \$ 3 \$ 3	3	15	272 70 37 4 1 2 8 6 3 2 28 3 42 4 3 2 6 39 33	132 252 39 17 67 38 660 154	1,091 468 128 303 263 324 291 129 124 356 236 554 110 131 139 143 1,314 304	0.25 0.27 0.28 1.82 0.35 0.14 2.99 0.22 0.78	0.74 0.38 2.53	0.74 2.98 6.67 3.31 6.22 9.54 3.74 4.57 11.49 1.84 2.00 0.07 5.06 7.14 2.83	16.52 15.07 11.86 6.98 4.63 6.97 2.09 8.36 11.43 5.73 4.59	1.72 2.48 2.61 0.41 1.25 2.35 5.87 0.97 1.70 0.57 0.77 1.65 1.43	9·81 6·18 7·07 4·41 6·67 0·87 2·42 8·87 1·04 1·02 2·83 2·59 6·57 6·57 2·16 7·61 7·47 8·25 2·74 8·76		26.81 11.59 23.35 20.68 14.64 19.18 9.14 10.21 11.52 15.54 17.61 9.49 2.62 12.43 7.28 25.32 16.91	58·13 62·43 35·31 45·95 38·03 32·72 37·96 33·69 25·32 23·43 27·78 38·72 26·77 20·21 25·79 27·39 50·41 33·38	45.11 45.62 30.40 40.95 35.71 30.56 50.85 42.52 30.46 23.10 27.94 26.47
2		333 88 88 88 88 88 88 88 88 88 88 88 88	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2	38 7 3 34 8 6 22 11 12 12 4 4 4 14 7	73 118 492 196 90 112 141 106 147 191 79 183	200 1,042 309 197 313 354 341 272 356 207 516	4.61 0.64 4.14 1.89 10.79 5.14 5.03 4.49	1.06 0.77 0.32 0.11	1.67 2.27	2·93 0·73 3·64 6·67 4·95 2·39 6·16 9·81 1·32 4·07 1·87	2·15 1·60 1·35 2·57 3·68 3·18 2·84 5·56 0·88 2·03 3·25 7·15	17.20 6.63 .10.14 5.28	1:44 1:03 0:85 3:50 1:30 1:96 1:76 0:43 0:50 1:73	14.25 17.14 20.80 25.15 12.74 17.83 16.69 17.33 21.58 20.44 9.86	32.99 29.05 44.06 39.65 27.89 49.84 41.90 55.76 39.93 38.10 25.84 63.63	32.76 23.97 36.73 37.50 37.49 42.96 43.26 45.49 34.79 35.77 22.84 42.28
•••		17 52	1	•••	12 17 53 ••• 28	192 1,072 189	453 1,938 344	0.88	1·71	3.84 11.44 0.05	9.77	10:32 1:81 1:97	11.40 2.51 6.75 1.82 2.00	2.37	17·49 28·69	63·20 31·61	39.26 29.15 40.63

ANNUAL STATEMENT No. VI-B.—Births and Deaths registered

1	2	1	3			4		5	6	7	8 - 1	9	10
				· 1A	Births.	1		-		1 5-4		ea.	
No.	Divisions and Towns.		Population (Census 1521).	Male.	Female.	Total.	Birth rate.	Cholera,	Small-pox.	Plague.	Fever,	Dysentery and Diarrhea.	Respiratory Deseases.
	TENASSERIM DIVISI —concld.	ION						•		,		•	,
44 45 46 47	Mergui Toungoo Shwegyin Pyu	•••	18,408 19,332 5,758 6,676	301 221 191 119	267 250 99 104	568 471 190 223	30·86 24·36 33·00 33·40	29 11 79	53	14 1 26	374 104 76 44	23 53 29 30	40 159 37 49
48 49 50 51 52 53 54 55 56	MAGWE DIVISION Thayetmyo Allanmyo Minbu Salin Magwe Taungdwingyi Yenangyaung Chauk Pakôkku	•••	10,768 11,219 5,403 6,834 7,819 6,306 9,515 5,617 19,507	96 120 108 132 104 132 167 43 243	-130 139 -90 136 101 137 162 30 243	226 259 198 268 205 269 329 73 486	20.98 23.09 36.65 39.22 26.22 42.66 34.58 13.00 24.91	 25 48 14 17 8 19	30 45	26 48 51 49 25 67 1 207	75 95 42 122 53 74 32 105 107	16 15 17 12 15 8 41 6 39	33 -5 42 22 11 108 155 26 256
	MANDALAY DIVISI	ON.	17,000									1	
57 -58 59 60 61 62 63 64 65 66	Mandalay Maymyo Myitngè Kyauksè Meiktila Myingyan Nyaung-u Yamèthin Pyinmana Pyawbwè	•••	148,917 16,558 3,439 6,107 8,868 18,931 7,094 8,869 14,886 4,704	358 91 124 146 283 102	3,553 346 62 127 144 244 90 119 221 80		42.52 44.49 41.10 32.70 27.84 27.07	125 4 13 70 19 	24 3 3 14 5 3 59	782 2 37 20 124 70 17 31 23	842 57 8 24 51 130 11 39 114 50	610 29 16 8 42 19 12 6 22 6	1,431 138 19 74 66 224 34 44 96 20
67 68 69 70	SAGAING DIVISION Shwebo Ye-u Sagaing Myinmu Mônywa	N.	10,605 2,742 11,858 4,354 9,225	78 195 69	220 65 229 72 158	143	35·76 32·38	 57 5 26	 6 1 2	23 16 55 1	46 7 174 42 98	26 2 15	53 26 24 17 102
	Total of Towns, Bu	rına	1,253,630	19,079	17,691	36,770	29'33	1,491	884	3,187	6,532	3,259	9,53 2
N	Total of Rural Distr · Burma.	ricts,	9,568,988	124,347	118,797	243,144	25'41	5,718	1,941	- 1,746	70,283	6,102	2,710
,	GRAND TOTAL, BU	RMA	10,822,618	143,426	136,488	279,914	25'86	7,20 9	2,825	4,933	76,815	9,361	· 12,242

from different causes in the Towns of Burma during the year 1928.

47		1	11 ·			12	13		-		1	14					-
		Inj	uries.							Ratio	o of Dea	ths per	1,000 of	populat	tion.		,
Suici	Females.	Wounding or accident.	Snake-bite or killed by wild beasts.	ies.	11.	All other causes.	1 Deaths from all es.	era.	Small-pox.	ue.	.:	Dysentery and Diarrhœa.	Respiratory Discases.	ies.	other causes.	For the year.	
Males.	Ferr	Wou	Snak by w	Rabies.	Total.	All o	Total L causes.	Cholera.	Sınal	Plague.	Fever.	Dyse Diari	Respi	Injuries.	All of	For th	Mean ous fiv
3	1	25, 29, 4, 6	•••	1 2	29 30 4 8	267 270 110 75	733 712 258 311	1.50 0.17 11.83	2.74	0.72 0.17 3.89	6°59	1·25 2·74 5·04 4·49	2·17 8·22	1·58 1·55	14·50 13·97 19·10	39.82 36.83 44.81	34·81 31·41 31·37
• • • • • • • • • • • • • • • • • • •	2	8 1 11 6 4 30 1 14 8	1 1 2	1	8 2 11 6 4 35 2 16 8	218 239 124 183 189 108 214 109 459	406 474 287 345 373 372 528 272 1,095	2·23 6·14 2·22 1·79 1·42 0·97	2·79 4·01 0·51 	2·41 4·28 9·44 6·27 3·96 7·04 0·18 10·61	7.77 17.85 6.78 11.73 3.36 18.69	1·49 1·34 3·15 1·76 1·92 1·27 4·31 1·07 2·00	1.41 17.13 16.29	0.74 0.18 2.04 0.88 0.51 5.55 0.21 2.85 0.41	21·30 22·95 26·78 24·17 17·13 22·49 19·41	42·25 53·11 50·48 47·70 58·99	35·21 36·39 43·49 41·54 43·42 48·03
7 1 1 1 1	1	50 18 4 1 37 15 2 4 31 1	3 1 3		62 20 5 2 38 15 5 32 2	4,098 256 57 172 149 341 127 140 399 81	7,974 501 110 321 382 937 278 256 728 241	0.84 0.06 0.65 1.47 3.70 2.68	0.87 0.34 0.74 0.56	5.25 0.58 6.06 2.26 6.55 9.87 1.92 2.08 4.89	3.44 2.33 3.93 5.75 6.87 1.55 4.40 7.66	1.75 4.65 1.31 4.74 1.00 1.69 0.68	8·33 5·52 12·12 7·44	0.33 4.29 0.79 0.70 0.56 2.15	15.46 16.57 28.16 16.80 18.01 17.90 15.79	30.26 31.98 52.56 43.08 49.50 39.19 28.86 48.90	27.62 41.41 43.36 38.11 38.04 22.16 29.18 44.59
1		16 6 26 3 14	•••	•••	16 6 27 .3 14	298 72 328 85 179	462 135 681 153 452	4·81 1·15 2·82	2·18 0·08		14.67 9.65		5.00 9.48 2.02 3.90 11.06	2.28	26.26 27.66 19.52	49·23 57·43 35·14	38.80
38	17	1,181	36	30	1,302	24,054	50,241	1'19	0'71	2'54	5°21	2.60	7.60	1 [.] 04	19'19	40.08	36'17
102	85	1,192	1,442	2 46	3,067	88,514	180,081	0.60	0°20	0.18	7:34	0'64	0.28	0.32	9.25	18'82	18'29
140	102	2,373	1,478	276	4,369	112, 568	230,322	0.67	0.26	0°46	7.10	0*86	1'13	0°40	10.40	21.28	20.33

STATEMENT VI-B (a).—Supplement to

1 [2		3										4
			<u></u>				•					H	evers.
			Population (Census 1921).			-	1		1			Canaha	- aninal
	•		nsus	Mala	ıria.	Ente	ric.	Typh	ius•	Relapsing	g Fever.	menir	ospinal ngitis.
No.	Divisions and Towns		ည် မ			1				-			
			ıtion										
			pula	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
			P ₀	Ã		Ď		Ă	R	Ω			<u> </u>
	ARAKAN DIVISION	7										7-	
	ARAKAN DIVISION				2.50	10	0.50					1	0.03
11	Akyab	•••	36,569 2,323	57	1.26 3.01	1 9	0.2	•••			•••	1	
2 3	Minbya Kyaukpyu	• • •	3,884	18	4.63						•••	•••	•••
4	Sandoway		3,762	2	0.53		•••	•••	• • •	•••	•••	1	0.27
	PEGU DIVISION.											- 0	
	PEGU DIVISION.				0.10		0.20					7	0.02
5	Rangoon	•••	345,505	236 76	0.68 4.05	88 1	0.20	•••	• • •	•••	•••	2	0.11
6	Pegu Nyaunglebin	• • •	18,769 7,496	38	5.07	1	0.13		• • •	•••	•••		•••
7 8	Tharrawaddy	• • •	3,625	9	2.48	•••			•••	•••	•••	•••	•••
9	Thônzè	•••	6,594	35	5.31	1	0.15	•••	•••	•••	•••	• • •	•••
10	Zigôn	•••	6,916	32	4.63	1	0.10		•••	•••	•••	•••	•••
11	Letpadan	• • •	9,901 7,666	25 8	2·52 1·04			•••	• • •	•••	•••	• • •	
12	Gyobingauk Minhla	•••	3,829		***				•••		•••	•••	•••
14	Nattalin	•••	4,898	2	0.41				•••	•••		• • •	
15	Syriam	** 00	15,193	2	0.13	2	0.13	•••	•••	•••	•••	1	0.06
16	Thôngwa	• • •	8,495	16 2	1.88 0.14	2	0°24 0°07	•••	• • •	•••		•••	•••
17	Insein [*] Thamaing	•••	14,308 4,109	٠		JI.		• • •	•••				
18	Kamayut	•••	6,483	1	0.15						•••	• • •	
20	Thingangyun	• • •	5,389	•••	•••	1	0.19	•••	•••	•••	•••		•••
21	Kanbe	•••	5,220	0.7	1.04	21	0.81	•••		•••	000	2	0.08
22	Prome	• • •	26,067 9,108	27 15	1.65	1	0.11			•••	•••		
23	Shwedaung Paungdè	•••	14,154	59	4.17	9	0.64					•••	
	1RRAWADDY DIVISI	ION.									-		
25	Bassein	• • •	42,563	91	2.14	18	0.42			•••	•••	3	0.07
26	Ngathainggyaung	•••	5,122	12	2.34	1	0.50			•••		•••	•••
27	Kyônpyaw	• • •	6,884	5	0.73	7	0.30		•••	•••	•••	•••	•••
28	Henzada	•••	23,651 7,793	38	1.61	3	0.38	,			•••		•••
29 30	Myanaung Kyangin	•••	7,793	35	4.95			•••		•••			
31	Myaungmya	•••	6,280	6	0.96	6	0.96			*** *	•••	•••	•••
32	Wakèma	• • •	8,447	38	4.50	11	1.30		•••	•••	•••	•••	•••
33	Moulmeingyun	• • •	6,115	35	5.72	6	0.88			•••	•••	•••	•••
34	Ma-ubin Yandoon	• • •	9,344	7	0.75	2	0.51			•••		•••	•••
36	Danubyu	•••	8,012	9	1.12	4	0.20)			•••		•••
37	Pyapôn	•••	8,109	40	4.93	26	3.21		•••	•••	•••	•••	
38	Kyaiklat	•••	9,224	72	7.81	31	3.36		•••	•••	•••	•••	•••
	TENASSERIM DIVIS	SION.			0.00								
39	Thatôn	• • •	15,091	6	0.40	•••		•••	•••	•••	•••		•••
40	Kyaikto Moulmein	• • •	7,168 61,301	64 72	1.17	22	0.30	5	***	•••	•••	•••	•••
41	Kawkareik	• • •	6,587	36	5.47		0.50			•••	•••		•••
43	Tavoy	• • •	27,480	1	0.04				}			•••	•••
, (317)min	A .		1	L		1	1	1	1	1	L		L

Annual Statement VI-B, 1928. (Paragraphs 18B, 32, 35, 36 and 58.)

											5		
										Dys	entery an	d Diarrh	0ea•
Meas	des.	Act Poliom	ite yelitis.	Influe	nza.	Other f	evers.	· Total	fevers•	Dyser	ntery.	Diarr	hœa.
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio•	Death.	Ratio.	Death.	Ratio.
4	1·72 	•••	•••	•••	•••	79 23 12 21	2·16 9·90 3·09 5·58	156 34 30 24	4·27 14·64 7·72 6·38	20 11 1	0·55 4·74 0·26	3	0.22
6 1 3 2 3 3	0.02 0.05 0.83 0.20 0.91 0.78 0.06 0.47 0.07 0.77		•••	30 2 1 	0.09	99 228 74 31 10 41 29 54 81 17 75 36 80 21 56 85 6	0·29 12·15 9·87 8·55 1·52 4·14 7·57 11·02 5·33 2·00 5·24 8·76 12·34 3·90 10·73 3·26 0·66 	446 310 113 43 46 32 69 16 32 56 87 39 79 36 86 22 56 137 22 68	1·29 16·52 15·07 11·86 6·98 4·63 6·97 2·09 8·36 11·43 5·73 4·59 5·52 8·76 13·27 4·03 10·73 5·26 2·42 4·80	480 38 7 2 13 13 15 11 7 2 18 9 63 1 8 2 18 9 42	1·39 2·02 0·93 0·55 1·97 1·88 1·51 1·43 1·83 0·41 1·18 1·06 4·40 0·24 1·23 0·38 0·69 0·99 2·97	386 46 5 7 3 1 2 8 3 1 11 21 3 3 3 2 25 4 1	1·12 2·45 0·67 1·93 0·45 0·14 0·20 1·04 0·78 1·47 0·73 0·46 0·56 0·38 0·96 0·44 0·07
1 3 2	0.02 0.40 0.17 0.15 0.37 0.22			2 5 2	0.05 0.73 0.25	14 37 36 3 3 19 29 	0·33 1·56 4·62 0·48 0·36 3·11 3·10	129 15 5 86 52 35 15 52 60 9 38 15 82 105	3·03 2·93 0·73 3·64 6·67 4·95 2·39 6·16 9·81 1·32 4·07 1·87 10·11 11·38	77 8 7 16 14 10 13 12 20 2 14 24 30 19	1.81 1.56 1.02 0.68 1.80 1.42 2.07 1.42 3.27 0.29 1.50 3.00 3.70 2.06	80 3 4 16 6 16 7 12 14 4 5 2 28 33	1.88 0.59 0.58 0.68 0.77 2.27 1.11 1.42 2.29 0.54 0.25 3.45 3.58
1 17	0.07	•••			0.02	42 6 30 94 406	2·78 0·84 0·49 14·27 14·77	49 70 126 130 424	3·25 9·77 2·06 19·74 15·43	24 61 56 3 33	1.59 8.51 0.91 0.46 1.20	30 13 55 10 12	1.99 1.81 0.90 1.52 0.44

STATEMENT VI-B (a).—Supplement to

-													4
			21).										Fevers.
			Population (Census 1921).	Ma	laria.	Ent	teric.	Tyr	ohus.	Relaps	ing Fever		rospinal ningitis.
No.	Divisions and To	wns.	Cen]		1		1
			ulatior	th.	.0	th.	io.	th.	io.	th.	io.	Death.	io.
			Pop	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Dec	Ratio.
	TENASSERIM DIV	ISION											
	—concld. Mergui Toungoo	•••	18,408 19,332	25 32	1.36	13	0.67		•••		•••	•••	
46 47	Shwegyin Pyu	• • •	5,7 5 8 6,676	72 42	12·50 6·29	4 1	0.69		•••		•••	•••	
	MAGWE DIVIS	ION.			-1						6.		
	Thayetmyo Allanmyo	•••	10,768 11,219	32 ⁻ 20	2.97	7	0.65		•••	•••	•••		1 000
	Minbu Salin	.0.	5,403 6,834	36	6.66 0.44	•••	•••	•••	•••	* • • •	••• ,	·	
	Magwe Taungdwingyi	• • •	7,819 6,306	4 54	0.21 8.26	2	0.32	•••	•••	•••	•••	•••	•••
55	Yenangyaung Chauk Pakôkku	•••	9,515 5,617	9 2 31	0.95 0.36 1.59	13	0.67		•••	•••	•••		000.
56	MANDALAY DIV	ISION	19,507	31	1. 39			•••	•••	•••	•••	,	
57.	Mandalay Mandalay		148,917	599	4.02	159	1.07					. 1	0.01
	Maymyo	•••	16,558		2.60	5	0.30		•••	•••	•••	1	0.06
	Myitngè Kyauksè	•••	3,439 6,107	4 18	1·16 2·95	6	0.38	•••	•••	•••	•••	•••	•••
	Meiktila Myingyan	•••	8,868 18,931	12 16	1·35 0·85	1 7	0·11 0·37	•••	•••	•••	•••	•••	•••
	Nyaung-u., Yamèthin	•••	7,094 8,869	1 26	0.14 2.93	6	0.68	•••	•••	•••	•••	•••	,
	Pyinmana. Pyawbwè	•••	14,886 4,704	89 · 50	5.98	17	1·14 	•••	•••	* • • •	•••	•••	, 00000 0000
41	SAGAING DIVIS	ION.											
	Shwebo Ye-u	•••	10,605 2,742	8 2	0.75 0.73	3	0.28 0.36	•••	•••	•••	•••	•••	•••
	Sagaing Myinmu	•••	11,858 4,354	17 42	1·43 9·65	1	0.08	•••	•••	•••	•••		•••
- 71	Mônywa	•••	9,225	20	2.17	2	0 .22				•	0.00	•••
	Total of Towns,	Burma	1,253,630	2,559	2.04	513	0'41					19	0.02

Annual Statement VI-B, 1928—contd.

													5
										Dys	entery ar	nd Diarrh	ıœa•
Meas	les.	Act Poliom	ne yelitis•	Influ	enza.	Other	fevers.	Total	fevers.	Dyse	entery.	Diar	rhœa.
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
	0.05	•••	•••		0 .16	349 55	18 [.] 96 2 [.] 85	374 104	20·32 5·38	20 37	1.09 1.91	3 16	0.19
	0.15	•••	•••	•••	•••	•••	•••	76 44	13·20 6·59	25 18	4·34 2·70	4 12	0.90 1.80
1 2	0:09 0:18	• • •	•••	4	0.37	31 73	2·88 6·51	75 95	6 [.] 97 8 [.] 47	10 7	0·93 0·62	6	0·56 0·71
1 1	0·19 0·15	•••	•••	.:.	•••	5 1 1 8	0·93 17·27	42 122	7·77 17·85	13 4	2·41 0·59	4 8	0·74 1·17
•••	•••	• • •	•••	3	0.38	46 18	5·88 2·85	53 74	6 [.] 78 11 [.] 73	5 2	0.64 0.32	10 6	1·28 0·95
 58	 2:97		 0.05		0.21	23 103	2·42 18·34	32 105 107	3·36 18·69 5·49	36 4 19	3.78 0.71 0.97	5 2 20	0.53 0.36 1.03
		-11											
36 1	0°24 0 °06	•••	•••	35 6	0·24 0·35	12 1	0.09 0.08	842 57	5.65 3.44	233 12	1·56 0·72	377 17	2.53
•••	•••	•••	•••	4	1°16	•••	•••	8 24	2·33 3·93	4 6	1.16 0.98	12 2	3·49 0·33
	 0.69	•••		35.	3·95 	3 94	0·34 4·97	51 130	5·75 6·87	26 11	2·93 0·58	16 8	1·80 0·42
7	0.99		•••	3	0.34	3 4	0·42 0·45	11 39	1.55 4.40	6 4	0·85 0·45	6 2	0.85 0.53
8	0:54	•••	•••	•••	•••	•••	• • •	114 50	7 [.] 66 10 [.] 63	11 6	0·74 1·28		0.74
			12.					•					
•••	•••	•••	• • •	•••	•••	35 4	3·30 1·46	46 7	4·34 2·55	10	0·94 0·36	16 1	1·51 0·36
1	0.08	•••	•	•••	•••	155	13.07	174 42	14 [.] 67 9 [.] 65	3	0.25	12	1.01
5	0.24		•••		•••	71	7:70	98	10.62	6	0.62	7	0.76
207	0.17	1	•••	140	0.11	3,093	2.47	6,532	5.21	1,772	1.41	1,487	1.19

STATEMENT VI-B (a).—Supplement to Annual

1	2		3				6				7
			1).		1	Respirator	y disease	es•			
		,	Population (Census 1921).	Pulmo	nary	Pneum	onia	Diseases		Dipht	heria.
No.	Divisions and Towns	S•	Censi	Tuberci	ulosis	Phetin		Respirator	y System•		
140.	Divisions and 10000		tion (
			opula	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
				<u> </u>		<u> </u>					
	ARAKAN DIVISIO	N.									
1	Akyab	• • •	36,569	18	0.49	109	2.48	12	0·33 0·86	• • •	
2 3	Minbya Kyaukpyu	• • •	2,323 3,884	1	0.26 0.23	6	1.24	1	0.27	•••	
4	Sandoway	• • •	3,762	2	0.55	•••		1	0 27	•••	
	PEGU DIVISION	J.					4.05	060	0.00	10	0.03
5	Rangoon Pegu	• • •	345,505 18,769	747 48	2·16 2·56	1,674	4·85 2·08	968 29	2.80 1.55	10	
7 8	Nyaunglebin Tharrawaddy	•••	7,496 3,625	 5	1.38	9 8	1.20 2.21	44 3	5.87 0.83	•••	•••
9	Thônzè	•••	6,594	3 1	0.45 0.14	19 4	2.88 0.58	22 1	3·34 0·14	•••	
10 11	Zigôn Letpadan	•••	6,916 9,901	6	0.61	11	1.11	7	0.71	•••	
12 13	Gyobingauk Minhla	•••	7,666 3,829	9	1.17	41 2	5·34 0·52	18 2	2·35 0·52	•••	
14	Nattalin	•••	4,898 15,193		0.33		0.33	5 33	1.02 2.17	•••	
15 16	Syriam Thôngwa	•••	8,496		• • •	15	1.77	7	0.85	•••	
17 18	Insein Thamaing	•••	14,308 4,109	27	1.89	30 1	2·10 0·24	37 26	2·59 6·33	•••	•••
19	Kamayut		6,483	• • •	•••	1	0.15	13 41	2.01 7.61	•••	
20 21	Thingangyun Kanbe	•••	5,389 5,220	1.	0.19	1	0.19	37	7:09	•••	
22 23	Prome Shwedaung	•••	26,067 9,108	95 2	3.64	52 23	1·99 2·53	68	2·61	•••	•••
24	Paungdè	•••	14,154	13	0.92	15	1.06	96	6.78	•••	
٥٢	IRRAWADDY DIVIS	SION.	10 562	120	2.82	100	2.35	147	3.45	1	0.02
25 26	Bassein Ngathainggyaung	•••	42,563 5,122	120 15	2.93	14	2.73				•••
27 28	Kyônpyaw Henzada	•••	6,884 23,651	31	1 31	63	2.66	26 57	3·78 2·41	•••	•••
29	Myanaung	•••	7,793	3 4	0·38 0·57	2 8	0·26 1·13	4 12	0·51 1·70	•••	•••
30 31	Kyangin Myaungmya	•••	7,064 6,280	36	5.73	50	7.96	22	3.50	•••	•••
32 33	Wakèma Moulmeingyun	•••	8,447 6,115	7 33	0.83 5.40	24 23	2·84 3·76	25 6	2·96 0·98	•••	• • •
34	Ma-ubin	•••	6,812	14	2.06 0.86	17	2·50 0·11	5 11	0.73 1.18	1	0.12
35 36	Yandoon Danubyu	•••	9,344 8,012	8 5	0.62	3	0.37	25	3.12	•••	•••
37 38	Pyapôn Kyaiklat	•••	8,109 9,224	35 11	4·32 1·19	49	6·04 0·65	6	0· 6 5	•••	•••
	TENASSERIM DIVIS										
39	Thatôn	•••	15,091	31	2.05 0.14	28 15	1.86 2.09	113 2	7·49 0·28	•••	•••
40 41	Kyaikto Moulmein	•••	7,168 6 1,301	1 116	1.89	80	1.31	218	3.29	•••	•••
42 43	Kawkareik Tavoy	•••	6,587 27 ,480		 0 [.] 11	12 1	1.82 0.04	 51	1 [.] 86	,,,	•••
		•••	3,,00								

Statement VI-B, 1928-contd.

8			9	1	10		11	12		13		14	15
Other Ti ous Dis		Beri-beri epidemio	including Dropsy	Lepr	osy•	Can	.cer•	Childbirth.	Dez	iths unde year.	r one	ity Rate.	
Death.	Ratio.	Death.	Ratio.	Death.	Ratio•	Death,	Ratio.	Deaths from Childbirth.	Male.	Female.	Total.	Infant Mortality Rate.	No•
5	0·03 1·29 	86 5	2·35 1·29 	•••	•••	 	0·05 	4 1 	93 9 12 12	78 6 11 6	171 15 23 18	313·19 234·38 230·00 163·64	1 2 3 4
49 10 1 4 1 1 1 4 5	0°14 1°33 0°28 0°58 0°26 0°06 0°15 0°15	96 10 2 7 1 3 5 3 3 23	0·28 1·45 0·20 0·91 0·26 0·61 0·33 0·57 0·12 1·62	51 3 2 2 1 2 8 1	0.15 0.16 0.27 0.29 0.10 0.13 0.15 	53 1 1 1 	0°15 0°13 0°28 0°14 0°06 	25 13 3 3 4 2 3 4 6 1 1 23 6	1,362 112 53 14 27 22 37 42 8 10 36 20 54 13 17 23 28 159 30 62	1,168 91 54 13 21 16 25 30 5 7 31 25 40 7 12 11 23 107 30 48	2,530 203 107 27 48 38 62 72 13 17 67 45 94 20 29 34 51 266 60 110	340·69 292·93 629·41 214·29 165·52 240·51 288·37 473·68 160·49 137·10 208·07 176·47 303·23 259·74 318·68 298·25 372·26 375·71 288·46 383·28	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
20 3 5 1 1 3 1 10 4 2	0·47 0·13 0·64 0·14 0·16 0·36 0·16 1·07 0·49 0·22	54 6 2 5 16 7	1.27 0.85 0.24 0.73 1.71 1.23 0.76	7 1 2 1 1 2 2 2	0°16 0°20 0°08 0°13 0°14 0°21 0°25 0°22	13 1 3 1 	0.31 0.20 0.13 0.16 0.37	6 1 18 1 3 10 4 3 6 1 5 5	247 16 25 127 35 20 38 49 37 40 36 24 32 38	196 16 19 89 44 25 29 31 20 41 22 12 20 30	443 32 44 216 79 45 67 80 57 81 58 36 52 68	341·03 235·29 287·58 309·46 318·55 205·48 356·38 312·50 322·03 383·89 231·08 227·85 297·14 350·52	25 26 27 28 29 30 31 32 33 34 35 36 37 38
7 1 46.	0·46 0·14 0·75	6 3	0·40 0·46 	3 1 11 	0·20 0·14 0·18	 10 	0·16 :::	7 8 13 9 18	63 28 213 85 111	47 29 174 79 85	110 57 387 164 196	213·59 298 43 237 2 522.2 209 63	40 41 42

STATEMENT VI-B (a).—Supplement

1	2		3	6						7	
	Divisions and Towns•		Population (Census 1921).	Respiratory diseases.						Diphtheria.	
								Diseases of the Respiratory System.		Diplimena.	
No.				- I de la constant							
,			ulatio	th.	i	Death.	io.	Death.	Ratio.	Death.	Ratio•
			Pop	Death.	Ratio.	Dez	Ratio.	Dez	Rat	De	Ra
	TENASSERIM DIV	VISION									
44 45	Mergui Toungoo	•••	18,408 19,332		0·16 3·62	8 71	0·43 3·67	29 18	1·58 0·93	•••	
46 47	Shwegyin Pyu	•••	5,7 58 6,676		1·39 1·20	24 12	4·17 1·80	5 2 9	0·87 4·34	•••	•••
	MAGWE DIVISION.										
48 49	Thayetmyo Allanmyo	• • •	10,768 11,219		0.09	13 4	1.31	20	1·86 	•••	•••
50 51	Minbu Salin	• • •	5,403 6,834		1.30 0.88	25 2	4·63 0·29	10 14	1.85 2.05	•••	
52 53	Magwe Taungdwingyi	•••	7,819 6,306		0·13 0·48	5 14	0.64	5 91	0 [.] 64 14 [.] 43	•••	
54 56	Yenangyaung Chauk	•••	9,515 5,617		0.95	23 2	2.42	123 24	12·93 4·27		
55	Pakôkku	•••	19,507	35	1.79	126	6.46	95	4.87	1	0.02
5 7	MANDALAY DIV	140.045	200	1.94	E44	2.45	598	4.02	5	0.03	
57 5 8	Mandalay Maymyo	•••	148,917 1 6,558		2.48	544	3:65	60	3.62		
5 9 6 0	Myitngè Kyauksè	•••	3,439 6,107	1 11	0·29 1·80	4 59	1·16 9·66	14 4	4·07 0·65	•••	
61 62	Meiktila Myingyan	•••	8,868 18,931	20 20	2.26	16 50	1.80 2.64	30 154	3·38 8·13	•••	•••
63 64	Nyaung-u Yamèṭhin	•••	- 7,09 4 8,869	6 7	0.85	9 35	1·27 3·95	19 2	2.68 0.23	•••	•••
65 66	Pyinmana Pyawbwè	•••	14,886 4,704	37	2.49	50.	3.36	9 20	0.60 4.25	•••	•••
	SAGAING DIVI	SION.			1.1						
67 68	Shwebo Ye-u	•••	10,605 2,742	9 1	0.85 0.36	11 4	1.04 1.47	33 21	3·11 7·66	•••	•••
69 7 0	Sagaing Myinmu	•••	11,858 4,354		0.23	10	2.30	24 6	2·02 1·38	•••	•••
71	Mônywa		9,225	10.	1.08	36	3.90	5 6	6.07		•••
	Total of Towns,	Burma	1,253,630	2,060	1.64	3,755	3.00	3,717	2 ;96	18	0.01

to Annual Statement VI-B, 1928—concld.

8	3		9	1	0	ŕ	1	12		13		14	1
Other Tous Di	ubercul- seases.	Beri-beri Epidemic	including Dropsy•	Lepro	osy•	Cano	cer.	Deaths from Childbirth.	Deat	hs under year.	one	Infant Mortality Rate.	No.
Death.	Ratio.	Death.	Ratio.	Death.	Ratio,	Death.	Ratio.	Deaths fror	Maie.	Female.	Total.	Infant Mor	
7	0·38 0·05	. 31	1.68 0.31	3	0.16	2	0.10	14 9	93 32	78 37	171 69	301.06 146.50	44 45
	•••		0.17	•••	•••	•••	•••	8 4	32 18	23 19	5.5 37	289·47 165·92	46` 47
2 ,	0 [.] 19		0.28	4	0·37 0·09	1	0.09	1 4	44 36	46 40	90 76	398·23 293·44	48 49
2	0.37	•••	• • •	6 2	1·11 0·29		•••	2 2	28 43	39 47	67 90	338·38 335·82	50 51
2 6	0·26 0·95		•••	3 4	0.98	1	 0.16	7	49 68	52 68	101 136	492 [.] 98 505 [.] 58	
31 7	3·26 0·36	16 2 3	1.68 0.36 0.12	1 13	0·11 0·67	 1	 0 [.] 05	23	71 27 131	55 25 128	126 52 259	382·98 712·33 532·92	55
30 5	0·20 0·30	10 2	0·07 0·12	49 	0.33	11 1	0·07 0·06	80 12	1,45 9 88	1,134 81	2,593 169	335·58 240·06	
•••			•••		0.16	•••	•••		33 35	15 30	48 65	313.73 258.97	
6	0.68	1 1	0·05 0·05	2 10	0·23 0·53	3 4	0·34 0·21	2 12	59 129	57 107	116 236	400·00 44 7 ·82	
4	0.26	•••		5	0.70	2	0.23	7 4	21 52	14 38	35 90	182·29 324·91	
2	0.13	10 5	0·6 7 1·06		•••	2	0.13		113 32	100	213 65	414·40 386·90	
•••		1	0.09		0.09		•••	4 2	106 15	72 20	178 35	392·94 244·76	
	0.08	•••	•••	4 1	0.34			9 5	92 28	75 28	167 56	393·87 397·16	
4	0.43			•••		3	0.33	7	73	67	140	426.83	71
298	0.24	445	0.32	215	0.12	122	0.10	454	6,526	5,401	11,927	324.37	

Annual Statement No. VII.—Death's registered from Cholera in the

-	1		1	4	1						
1	2	Gircle	s of	Village-t	- acta	1	1	1	1	1	
No.	Divisions and Districts	Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.
1 2 3	ARAKAN DIVISION. Akyab Kyaukpyu Sandoway PEGU DIVISION.	11 6 6	11 4 3	871 355 178	44 22 4	•••	21	315 5 3	24 2 38 7	276 40 7	248 16
4 5 6 7 8 9	Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	1 16 16 9 9	1 7 9 8 4 10	1 456 556 470 376 446	1 22 34 42 22 17	6 3 14 4	15 1 10 2	17 1 9 4 2	17 2 106 3 1	5 3 4 14 6 4	10 6 8 1
10 11 12 13 14	Henzada Myaungmya Ma-ubin Pyapôn TENASSERIM	9 7	15 8 9 7 6	691 596 591 314 346	87 71 103 90 59	1 18 2 5 5	1 3 20 40 15	49 6 46 87 34	170 8 127 121 213	89 5 17 30 68	84 1 4 10 10
15 16 17 18 19	Amherst Tavoy Mergui	10 6 6	8 7 11	387 350 180 148 563	46 55 11	1	 1	25 27 	22 119 1	89 26 	851 41 10
20 21 22 23	Minbu Magwe	10	5 3 10 5	643 360 468 743	11 11 149 52	2 1 5 	 	2	3 1	7	5 1
2 ² 2 ⁵ 26 27 28	Kyauksè Meiktila Myingyan	10 5 5 9	8 4 5 7 7	336 278 401 197 359	107 26 143 26 55		•••		 	1° 1 5 	3 2 12
29 30 31	Shwebo Sagaing	8 8	2 8 5 197	283 374	2 61 17 1,390	67	129	632	1,203	697	474

Districts of Burma during each month of the year 1928. (Paragraph 21.)

5								6			7	1	8	1
Ī	1		1					Total.		Ratio of of	deaths p	er 1,000 on.	Jo (
	July,	August.	September.	October.	November.	December	Males,	Females.	Total.	Maies.	Females.	Total.	Mean ratio per 1,000 of previous five years.	No
	175 30 	17 13 	23	24	17 19 4	51 8 	785 94 12	624 75 9	1,409 169 21	2·55 0·97 0·22	2·35 0·73 0·16	2·45 0·85 0·19	0:56 0:40 0:01	1 2 3
	3 1 9 5	6 2 	1 4 	1 5 28 3	4 1 51 8 25	1 36 20 63	77 34 74 77 28 76	9 13 56 60 18 33	86 47 130 137 46 109	0.32 0.14 0.30 0.38 0.18 0.42	0.08 0.06 0.23 0.37 0.13 0.17	0.25 0.11 0.26 0.38 0.16 0.29	0·27 0·20 0·48 0·19 0·28 0·68	4 5 6 7 8 9
	14 34 9	3 33 2	 14 	2 88 1 1	31 8 2 3	20 38 5 13	269 152 144 206 228	164 127 85 114 127	433 279 229 320 355	1.06 0.56 0.73 1.22 1.45	0.69 0.46 0.49 0.71 0.96	0.88 0.51 0.62 0.97 1.23	0.50 0.59 0.34 0.97 0.66	10 11 12 13 14
	7 2 3	· · 3		 50	68	 52	92 121 171	96 64 100	188 185 271	0·37 0·54 0·87	0.43 0.33 0.54	0.40 0.44 0.71	0·14 0·20 0·01 0·01 0·19	15 16 17 18 19
	•••	10	 1 35	18 3 46 57	21 28 114 68	39 9 132 33	59 19 162 136	36 22 138 69	95 41 300 205	0.47 0.14 0.77 0.61	0.28 0.16 0.65 0.29	0·37 0·15 0·71 0·44	0°35 0°88 0°42 0°55	20 21 22 23
	3 97 3	2 229 85 5	38 83 19	37 135 90 119	187 1 110 43 156	197 64 1 23	244 42 303 177 165	186 29 324 150 134	43 0 71 627 327 299	1.33 0.60 2.20 0.83 1.03	1.07 0.40 2.13 0.66 0.83	1.21 0.50 2.16 0.74 0.93	0.40 0.79 0.54 0.32 0.34	24 25 26 27 28
	•••	•••	20	24	 151 8	10 87 98	6 150 62	4 133 45	10 283 107	0 03 0 97 0 38	0.02 0 .77 0.23	0.03 0.84 0.30	0·05 0·49 0·52	29 30 31
	395	410	331	733	1,128	1,010	4,165	3,044	7,209	0.75	0.28	0.67	0.41	

Annual Statement No. VIII.—Deaths registered from Small-pox in the

1	2	1		3		4		1							5
-		Cir	cles o	f Re	gistration	Village-	tracts.	-		1			1		_
No.	Divisions and Districts.		Number in each district.		Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-	morada and word	January.	February.	March.	April.	May.	June.	July.
	Arakan Division.										e				
1 2 3	Akyab Kyaukpyu Sandoway			1 6 6	10 1 1	871 355 178	,	25 1 2	23	29 2	36 4	86 1 	45 	75 	32
4	PEGU DIVISION.								11	93	105	70	25	7	4
4 5 6 7 8 9	Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome		1	1 6 6 9 9 4	13 6 8 5 6	1 456 556 470 376 446		1 92 11 19 32 14	44 9 1 1	7 1 7 7 4	125 32 5 15 15	79 36 6 4 16 19	12 4 1 14 6	12 1 3 2 1	3 3
	IRRAWADDY DIVISION														
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn		1	5 9 7 6	6 7 2 3 6	691 596 591 314 346		6 46 2 15 21	6	2 4 1 11	1 15 3 5 10	 15 9 7	5 4 6	4	3 3 2 3
	TENASSERIM DIVISIO	N.													
15 16 17 18 19	Thatôn Amherst Tavoy Mergui Toungoo	•	1	13 10 6 6 15	5 6 1 12	387 350 180 148 563		17 24 1 90	3 41	3 25 29	13 27 117	34 1 87	2 17 44	3 7 14	3 13 27
	MAGWE DIVISION.														
20 21 22 23	Thayetmyo Minbu Magwe Pakôkku			8 10 10 9	7 6 4	643 360 468 743		14 22 36	22 3	9 6	24 2 16	32 10 11	25 2 16	9 9 3	4 11
	MANDALAY DIVISION	ī.													
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan Yamèthin		,	10 5 5 9	6 4 7 . 11	336 278 401 197 359		9 5 22 63	1 5	5 : 11 11	6 1 3 15	12 1 26 36	3 9 43	3 4 8 12	3 2 30 9
2 9	SAGAING DIVISION Shwebo			10	7	622		7		1	. 6	17	13	37	4
30 31	Sagaing Lower Chindwin			8 8	6 8	283 374		52 64	17 2	17 3	22	22 28	11 17	2 27	1 37
	Total, Burma		28	37	165	12,939	7	13-	178	288	531	595	328	244	205

Districts of Burma during each month of the year 1928.

-			6						7			8		9	1
Ī	1	l	1	1			Total.		Number deaths amo	of these	Ratio of of	deaths p	er 1,000 on.		
	August.	September.	October.	November.	December.	Males.	Females.	Total.	Under 1 year.	One and under 10 years.	Males.	Females.	Total.	Mean ratio per 1,000 of previous five years.	No.
	27	62	28	1 	34	276 	202 1 2	478 1 6	1	 1	0.90	0·76 0·01 0·04	0:83 0:01 0:05	0·16 0·03 0·14	1 2 3
	1 6 1 	13	1	4	10	267 87 .6 17 36 29	111 63 6 8 22 19	378 150 12 25 58 48	39 11 4 1 9	72 66 7 5 0	1.12 0.37 0.02 0.08 0.23 0.16	1.04 0.30 0.02 0.05 0.16 0.10	1.09 0.34 0.02 0.07 0.20 0.13	0.78 0.36 0.04 0.15 0.15 0.27	4 5 6 7 8 9
	3 10 3	 1 1 	1 6 5	5 3 2	4 5 1 2	10 44 3 16 29	9 27 1 6 27	19 71 4 22 56	12 9 7	3 30 3 18	0.04 0.16 0.02 0.09 0.19	0.04 0.10 0.01 0.04 0.20	0.04 0.13 0.01 0.07 0.19	0.06 0.06 0.11 0.20 0.23	10 11 12 13 14
	6 12 25.		1 9	 2 9	1 4	16 73 · 1 228	14 69 203	30 142 1 431	9	28 27	0.07 0.33 0.01 1.15	0.06 0.35 1.10	0.06 0.34 0.01 1.13	0.16 0.10 0.01 0.09 0.15	15 16 17 18 19
	16		4	•••	4	78 23 41	71 11 15	149 34 56	6 	54 1 	0.62 0.11 0.18	0·55 0·05 0·06	0.58 0.08 0.12	0°30 0°53 0°50 0°26	20 21 22 23
	 14 9	 2 7	10 2		1 5	22 5 59 91	12 6 55 63	34 11 114 154	 1 1 13	7 10 35	0·12 0·04 0·28 0·57	0.07 0.04 0.24 0.39	0·10 0·04 0·26 0·48	0.45 0.15 0.26 0.78 0.16	24 25 26 27 28
	2 3 9 147	10 1 122	1 5 74	 5 33	1 5 2 80	47 55 88 1,651	45 46 60 1,174	92 101 148 2,825	12 23 191	32 2 23 512	0.36 0.35 0.54 0.30	0·22 0·27 0·31 0·22	0·24 0·31 0·42 0·26	0.16 0.39 0.21	29 30 31

Annual Statement No. IX.—Deaths registered from Fevers in the

	ANNUAL	- OIRI	EWILNI	110.	128.		regist	crew jr			
1	2	3		4							
		Circles of trad	of Regis-	Village-	tracts.	1	1]		ì	
No.	Divisions and Districts.	Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.
	ARAKAN DIVISION										
1 2 3	Akyab Kyaukpyu Sandoway PEGU DIVISION.	11 6 6	11 6 6	871 355 178	654 32 6 178	653 143 166	540 95 74	511 89 77	493 129 67	481 93 53	697 8 9 59
4 5 6 7 8 9	Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	1 16 16 9 9	1 16 16 9 9	1 456 556 470 376 446	1 424 473 470 313 351	41 220 359 117 195 359	50 193 261 108 183 253	53 302 296 132 93 266	40 199 206 146 167 257	36 230 305 117 211 198	44 331 274 182 108 404
	IRRAWADDY DIVISION.										
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	15 9 9 7 6	15 9 9 7 6	691 596 591 314 346	686 596 523 280 346	160 245 181 64 147	141 -140 -91 -67 -162	144 169 80 44 143	152 173 109 71 132	218 192 97 73 165	200 170 134 87 162
	TENASSERIM DIVISION										
15 16 17 18 19	Thatôn Amherst Tavoy Mergui Toungoo	13 10 6 6 15	13 10 6 6 15	387 350 180 148 563	387 350 180 148 563	341 111 108 109 268	325 84 170 67 222	247 129 214 116 273	168 123 160 48 177	169 121 307 119 171	268 164 322 209 249
20 21 22 23	Magwe Division. Thayetmyo Minbu Magwe Pakôkku	8 10 10 9	8 10 10 9	643 360 468 743	643 341 204 722	293 393 192 436	204 180 241 336	326 228 150 350	163 212 146 408	206 168 82 283	448 181 86 288
24 25 26 27 28	Mandalay Mandalay Kyauksè Meiktila Myingyan Yamèthin	10 5 5 9 11	10 5 5 9 11	336 278 401 197 359	336 278 307 189 327	169 161 201 173 167	179 114 84 110 121	153 154 60 79 167	185 132 109 149 171	122 94 102 107 143	179 87 102 78 156
29 30 31	Shwebo Sagaing Lower Chindwin	10 8 8	10 8 8	622 283 374	618 221 347	273 174 263	204 123 195	242 121 196	225 127 201	245 93 175	296 87 192
	Total	287	287	12,939	11,782	6,882	5,317	5,604	5,245	5,176	6,333

Districts of Burma during each month of the year 1928. (Paragraph 32.)

5	,				1		6			7		8	I
1)	1				-	Total.		Ratio of	deaths p	er 1,000	00 urs.	
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 of previous five years.	No.
547	448	627	551	435	746	3.536	3,193	6,729	11:47	12.02	11 [.] 72	12 ⁻ 11	1
198	110	113	113	140	105	687	730	1,417	7:11	7.07	7 [.] 09	6 ⁻ 27	2
87	93	78	124	65	63	506	500	1,006	9:15	8.81	8 [.] 98	10 ⁻ 99	3
37	35	25	32	27	26	325	121	446	1:36	1·13	1·29	1.46	4
236	175	161	132	98	195	1,475	997	2,472	6:27	4·74	5·55	5.30	5
243	231	245	185	252	259	1,630	1,486	3, 1 16	6:62	6·04	6·33	8.86	6
152	112	122	226	174	171	981	778	1,759	4:88	4·76	4·82	4.10	7
253	238	125	150	189	136	1,173	875	2,048	7:58	6·49	7·07	6.12	8
536	562	407	325	268	366	2,102	2,099	4,201	11:50	11·12	11·31	9.51	9
250	249	222	287	177	181	1,264	1.117	2,381	5'00	4·72	4·86	5·21	10
153	197	139	262	145	247	1,224	1,008	2,232	4'48	3·63	4·05	6·30	11
88	141	129	178	135	159	915	607	1,522	4'66	3·49	4·11	4·03	12
106	64	67	108	124	73	551	397	948	3'27	2·46	2·87	3·30	13
90	128	103	128	126	159	961	684	1,645	6'13	5·17	5·69	4·78	14
329	335	245	185	264	242	1,652	1,466	3,118	6.72	6.51	6.62	5·96	15
199	187	194	191	144	108	1,039	716	1,755	4.65	3.68	4.20	3·25	16
245	244	230	248	198	361	1,443	1,364	2,807	17.82	18.00	17.90	14·75	17
165	167	142	125	118	197	884	698	1,582	12.13	11.15	11.68	10·51	18
418	301	275	267	332	329	1,861	1,421	3,282	9.42	7.71	8.59	8·03	19
133	165	347	158	171	540	1,574	1,580	3,154	12.56	12.14	12·35	11.05	20
275	294	266	351	372	432	1,710	1,642	3,352	12.71	11.74	12·22	12.21	21
244	146	125	205	118	242	1,037	940	1,977	4.90	4.44	4·67	5.10	.22
369	443	611	603	573	482	2,642	2,540	5,182	11.80	10.50	11·13	8.98	23
162	240	202	316	336	368	1,456	1,155	2,611	7·96	6.65	7:32	7·96	24
117	150	102	216	299	271	973	924	1,897	13·81	12.80	13:30	11·44	25
117	106	117	103	77	67	711	534	1,245	5·17	3.51	4:29	3·75	26
238	162	137	238	146	196	944	869	1,813	4·43	3.80	4:10	3·61	27
149	160	166	253	273	305	1,227	1,004	2,231	7·63	6.19	6:90	6·98	28
325 166 265 6,892	282 158 229	270 170 280	324 186 402	463 270 390	552 294 429	1,831 1,012 1,585	1,870 957 1,632	3,701 1,969 3,217	10·20 6·53 9·79	9·33 5·57 8·49 6·80	9·74 6·02 9·08	8:20 5:65 7:98	29 30 31
0,092	6,552	6,442	7,172	6,899	8,301	40,911	35,904	76,815	7.38	0.80	7.10	0 83	

Annual Statement No. X.—Deaths registered from Dysentery and Diarrhaa

1	2	k	3	4							
		Circ	les of ration.	Village	-tracts.						
No.	Divisions and Districts.	Number in each district.	Number from which deaths from dysentery and diarrhæa were reported.	Number in each district.	Number from which deaths from dysentery and diarrhœa were reported.	January.	February.	March.	April.	May.	June.
	Arakan Division.	ć									
1 2 3	Akyab Kyaukpyu Sandoway	11 6 6	11 4 5	871 355 178	138 22 52	19 5 11	22	31 2 7	48 15 10	175 2 4	34 1 16
4 5 6 7 8 9	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	1 16 16 9 9	1 12 16 9 9	1 456 556 470 376 446	1 55 212 109 40 201	.82 8 19 16 15 20	68 28 10 23 8 14	86 6 12 4 11 6	98 14 9 16 10	81 17 39 25 11 22	119 21 62 13 23 57
•	IRRAWADDY DIVISION.								-		
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	15 9 - 9 7 6	15 9 9 7 6	691 596 591 314 346	233 282 203 18 32	36 15 28 24 12	15 8 26 23 19	31 17 26 5 23	120 27 42 57 23	132 40 34 17 36	28 47 48 16 24
	TENASSERIM DIVISION.					1	-	•			
15 16 17 18 19	Thatôn Amherst Tavoy Mergui Toungoo	13 10 6 6 15	13 10 6 5 13	387 350 180 148 563	140 161 120 63 13	46 27 14 3 12	38 21 24 6 4	47 34 20 15 12	32 24 9 7 9	36 49 29 5 5	46 34 30 13 22
,	MAGWE DIVISION.										
20 21 22 23	Thayetinyo Minbu Magwe Pakôkku	8 10 10 9	7 10 10 9	643 360 468 743	23 103 100 284	27 13 13 24	3 17 8 17	6 10 4 19	2 6 14 25	2 12 6 49	14 17 10 38
	MANDALAY DIVISION.										
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan Yamèthin	10 · 5 5 9 11	8 5 5 9	336 278 401 197 359	23 26 107 92 60	54 2 13 17 9	42 7 11 8	25 6 13 3	41 6 10 6	57 1 17 6 2	62 7 24 6 6
29 30 31	SAGAING DIVISION. Shwebo Sagaing Lower Chindwin	10 8 8	10 7 8	622 283 374	78 81 44	23 12 6	8 9 6	15 9 2	60 7 4	15 10 6	19 24 15
	Total	287	273	12,939	3,116	625	496	507	765	942	896

n the Districts of Burma during each month of the year 1928. (Paragraph 34.)

Solution Solution
575 1;08 0.91 1:00 0.89 1 58 0.34 0.24 0.29 0.71 2 63 0.61 0.51 0.56 0.54 3 866 2.43 2.67 2.51 3.39 4 157 0.42 0.28 0.35 0.33 5 351 0.76 0.66 0.71 0.77 6 154 0.47 0.36 0.42 0.61 7 199 0.82 0.53 0.69 0.52 0.52 511 1.46 1.29 1.38 0.90 10 359 0.71 0.59 0.65 0.80 11 356 1.15 0.74 0.96 1.02 12 198 0.68 0.52 0.60 0.60 0.60 13
866 2.43 2.67 2.51 3.39 4 157 0.42 0.28 0.35 0.33 5 351 0.76 0.66 0.71 0.77 6 154 0.47 0.36 0.42 0.61 7 199 0.82 0.53 0.69 0.52 8 511 1.46 1.29 1.38 0.94 9 604 1.41 1.04 1.23 0.90 10 359 0.71 0.59 0.65 0.80 11 356 1.15 0.74 0.96 1.02 12 198 0.68 0.52 0.60 0.60 0.60 13
199 0.82 0.53 0.69 0.52 8 511 1.46 1.29 1.38 0.94 9 604 1.41 1.04 1.23 0.90 10 359 0.71 0.59 0.65 0.80 11 356 1.15 0.74 0.96 1.02 12 198 0.68 0.52 0.60 0.60 0.60 13
198 0.68 0.52 0.60 0.60 13
259 0.96 0.82 0.90 0.91 14 541 1.26 1.02 1.15 0.87 15
387 0.99 0.85 0.93 0.96 16 263 1.95 1.39 1.68 0.67 17 112 0.78 0.88 0.83 1.28 18 195 0.69 0.31 0.51 0.55 19
135 0.61 0.45 0.53 0.36 20 220 0.94 0.67 0.80 0.55 21 245 0.61 0.55 0.58 0.33 22 477 1.14 0.92 1.02 0.91 23
684 2.06 1.77 1.92 1.28 24 42 0.28 0.30 0.29 0.17 25 346 1.27 1.12 1.19 0.23 26 257 0.73 0.45 0.58 0.33 27 120 0.39 0.35 0.37 0.29 28
359 1.04 0.86 0.94 0.31 29 146 0.52 0.38 0.45 0.68 30 121 0.41 0.29 0.34 0.22 31 9,361 0.97 0.75 0.86 0.75

Annual Statement No. XI.—Deaths registered from Respiratory Diseases

1	2	3	1	4	<u> </u>						
		Circl Registr	es of	Village-	tracts.	1	1	1		1	
No.	Divisions and Districts.	Number in each district.	Number from which deaths from respiratory diseases were reported.	Number in each district.	Number from which deaths from respiratory diseases were reported.	January.	February.	March,	April.	May.	June.
1 2 3	ARAKAN DIVISION. Akyab Kyaukpyu Sandoway	11 6 6	11 3 5	871 355 178	86 14 36	55	74 1 1	60 2 2	49 1 8	50 4 4	24 2 10
4 5 6 7 8 9	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	1 16 16 9 9	1 9 14 9 8 10	1 456 556 4 70 376 446	1 12 77 96 13 46	276 23 14 9 17 34	268 17 24 8 21 39	286 20 21 10 14 35	271 . 12 28 15 23 24	279 21 19 21 18 18	305 6 28 9 34 32
10 11 12 13 14	IRRAWADDY DIVISION. Bassein Henzada Myaungmya Ma-ubin Pyapôn	15 9 9 7 6	12 9 9 7 6	691 596 591 314 346	32 126 33 16 24	42 21 25 5 12	47 23 18 8 19	55 23 25 12 19	49 34 20 11 26	40 57 21 10 17	36 45 29 8 25
15 16 17 18 19	Tenasserim Division. Thatôn Amherst Tavoy Mergui Toungoo	13 10 6 6 15	13 10 4 5 9	387 350 180 148 563	34 178 64 35 9	22 48 12 8 14	29 44 5 6 20	27 71 14 4 26	38 48 12 7 18	40 50 14 11 15	38 67 12 9 17
20 .21 22 23	Magwe Division. Thayetmyo Minbu Magwe Pakôkku	8 10 10 9	5 7 10 9	643 360 468 743	7 31 54 148	13 12 38 33	9 12 34 38	7 12 28 30	1 17 40 27	 11 32 16	5 4 46 22
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan Yamèthin SAGAING DIVISION.	10 5 5 9 11	8 5 5 7	336 278 401 197 359	10 7 17 19 12	150 5 8 24 26	102 5 8 21 15	120 1 6 13 11	93 6 2 17 12	92 4 8 27 7	103 4 13 28 8
29 30 31	Shwebo	8 8	8 7	622 283 374	19 54 16	15 14 18	3 3 11	22 .14 12	11 8 2	13 4 6	12 4 9 994
	Total	287	239	12,939	1,326	998	933	1,002	930	929	994

in the Districts of Burma during each month of the year 1928. (Paragraph 35.)

5							6			7	}	8	1
							Total.		Ratio of	f deaths p	per 1,000 on.	of	
July,	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 of previous five years.	No.
38	43	41	26	26	47	352	181	533	1·14	0.68	0·93	0·79	1 2 3
3	3	2	4	4	3	20	9	29	0·21	- 0.09	0·15	0·07	
3	6	5	2	3	1	31	19	50	0·56	0.33	0·45	0·31	
324	328	243	263	261	285	2,239	1,150	3,389	9·38	10.77	9.81	9·78	4
20	17	23	21	16	16	140	72	212	0·59	0.34	0.48	0·36	5
26	19	37	21	29	18	162	122	284	0·66	0.50	0.58	0·76	6
14	9	14	21	17	13	95	65	160	0·47	0.40	0.44	0·73	7
37	23	13	20	10	9	156	83	239	1·01	0.62	0.83	0·48	8
40	69	38	28	32	38	223	204	427	1·22	1.08	1.15	0·98	9
60	59	60	69	58	54	333	296	629	1·32	1·25	1·29	0.81	10
30	19	24	27	15	18	193	143	336	0·71	0·52	0·61	0.64	11
26	29	30	19	31	16	188	101	289	0·96	0·58	0·78	0.57	12
22	17	29	23	21	8	101	73	174	0·60	0·45	0·53	0.71	13
17	11	19	18	23	20	124	102	226	0·79	0·77	0·78	0.69	14
27	26	720	40	44	48	237	162	399	0.96	0·72	0.85	0.52	15
71	76	61	55	52	49	416	276	692	1.86	1·42	1.66	1.19	16
12	11	12	17	13	13	88	59	147	1.09	0·78	0.94	0.64	17
6	7	5	8	9		49	31	80	0.67	0·50	0.59	0.80	18
28	22	26	22	29	26	123	140	263	0.62	0·76	0.69	0.45	19
1	6	4.	4	3	11	45	19	64	0·36	0·15	0·25	0°25	20
5	11	13	14	9	8	72	56	128	0·54	0·40	0·47	0°59	21
41	48	51	28	25	15	222	204	426	1· 0 5	0·96	1·01	0°51	22
25	32	51	48	50	33	198	207	405	0·88	0·86	0·87	0°54	23
117	139	153	185	203	142	940	659	1,599	5·14	3·80	4·48	4.08	24
7	5	7	11	18	13	42	44	86	0·60	0·61	0·60	0.42	25
5	6	11	8	9	6	59	31	90	0·43	0·20	0·31	0.48	26
25	33	30	27	27	27	165	134	299	0 77	0·59	0·68	0.49	27
9	15	15	22	16	14	92	78	170	0·57	0·48	0·53	0.71	28
7	7	11	32	17	23	80	93	173	0·45	0·46	0·46	0·58	29
6	3	9	14	7	9	5 7	38	95	0·37	0·22	0·29	0·69	30
12	11	22	17	17	12	75	74	149	0·46	0·38	0·42	0·36	31
1,064	1,110	1,079	1,114	1,094	995	7,317	4,925	12,242	1.32	0.93	1.13	1.02	

Annual Statement No. XII.—Deaths registered from Plague in the

1	2		3		4	. [
			Circle Registr	es of ration	Village	tracts.				1		
No.	Divisions and Dist	ricts.		Number from which deaths from Plague were reported.	Number in each district.	Number from which deaths from Plague were reported.	January.	February.	March.	April.	May.	June.
	Arakan Divis	ION.										
1 2 3	Akyab Kyaukpyu Sandoway		11 6 6	•••	871 355 178	•••	•••	•••	•••	•••	•••	•••
	Pegu Divisi	on.										20
4 5 6 7 8 9	ø		1 16 16 9 9	1 7 11 2 5 8	1 456 556 470 376 446	1 11 13 4 12 14	28 15 72 1 14 95	42 41 6+ 1 34 76	32 56 63 3 54 51	17 13 19 13 7	19 2 1 2 8 	29 3 5 , 14
	IRRAWADDY DIVISION											
10 11 12 13 14	Bassein Henzada Myaungmya Ma-ubin Pyapôn	•••	15 9 9 7 6	12 5 5 5 3	691 596 591 314 346	12 9 9 6 3	 28 2	26 55 5 1 5	31 54 20 7 25	28 5 33 7 6	16 3 16 10 10	7 1 5 15
	TENASSERIM DI	vision.										
15 16 17 18 19	Thatôn Amherst Tavoy Mergui Toungoo	•••	13 10 6 6 15	9 1 3	387 350 180 148 563	23 1 3	15 2 2	32 1 7	21 24	38 4	22 1	15 1
	Magwe Divis:	ion.										
20 21 22 23	Thayetmyo Minbu Magwe Pakkôku	•••	8 10 10 9	3 4 9 2	643 360 468 743	5 4 22 5	61 33 80 44	18 13 34 102	3 5 80 76	6 25 4	 3 2 	₂
	MANDALAY DIV	ISION.										
24 25 26 27 28	Mandalay Kyauksè Meiktila Myingyan Yamèthin	•••	10 5 5 9 11	6 3 5 7 8	336 278 401 197 359	15 12 115 36 33	260 18 166 186 77	349 18 65 156 29	183 7 28 92 10	15 42 31 	 40 	•••
29 30 31	SAGAING DIVI Shwebo Sagaing Lower Chindw	•••	10 8 8	9 7 5	622 283 374	9 49 7	39 105 	29 98 6	29 60 ·	4 2	2	•••
	Total	•••	287	145	12,939	433	1,377	1,307	1,014	319	157	97.

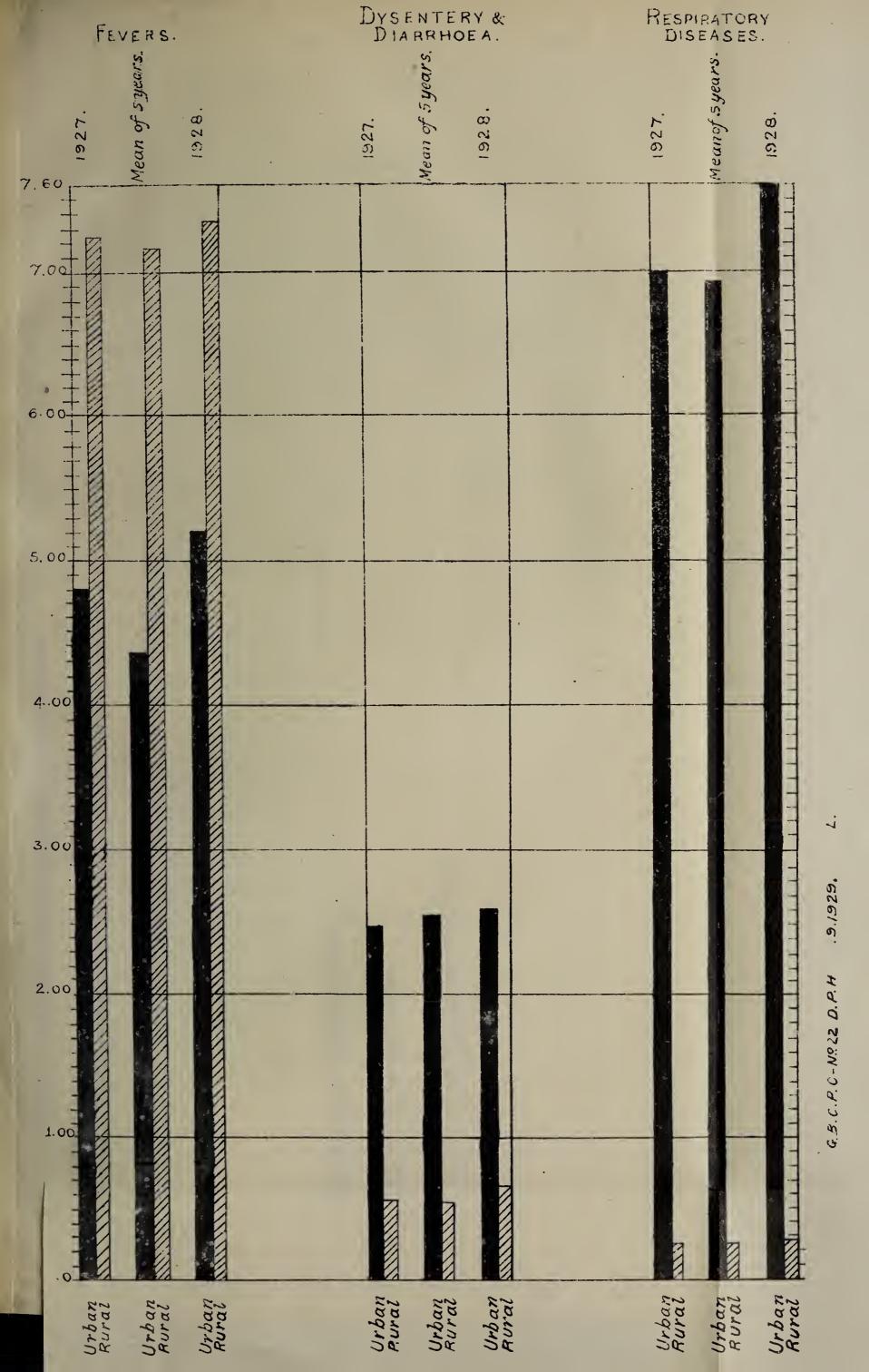
Districts of Burma during each month of the year 1928. (Paragraph 28).

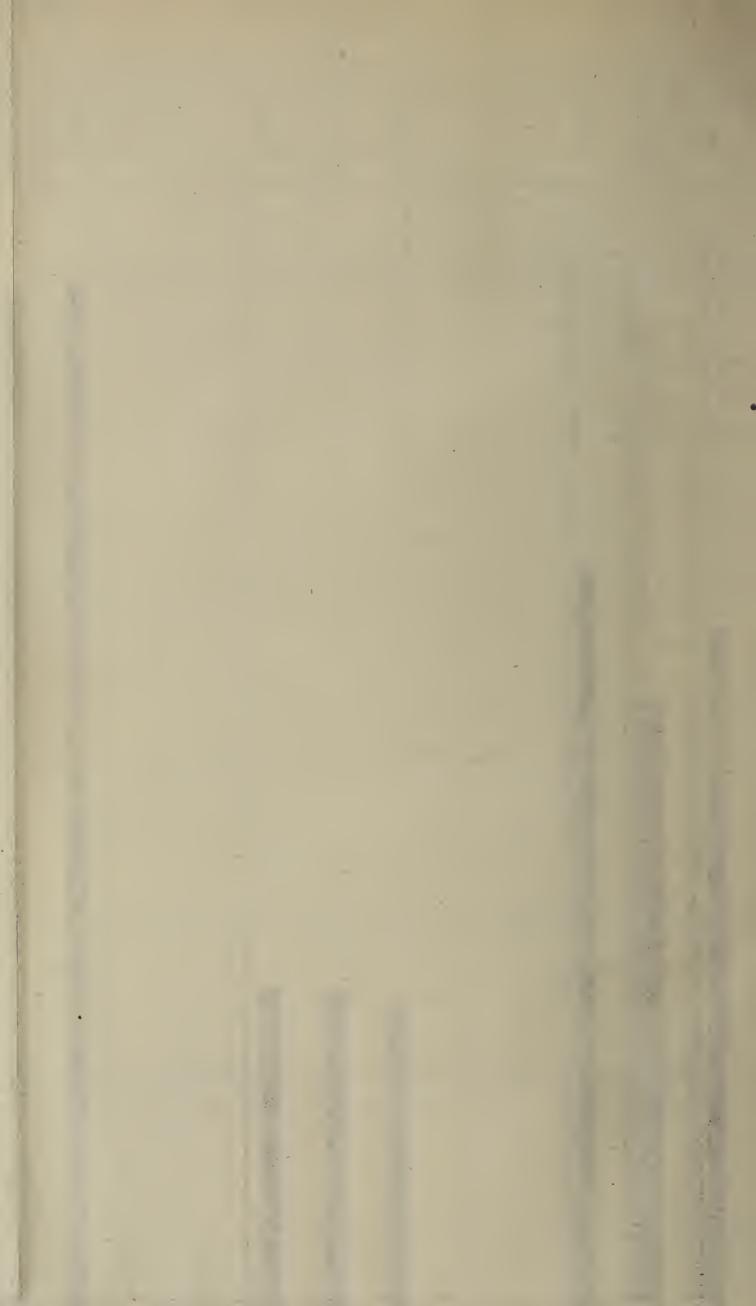
5							6				7 .	8	1	
T							Total.			Ratio o	f deaths population	of		
July,		August.	September.	October.	November	December.	Males.	Females.	Total.	Males,	Females.	Total.	Mean ratio per 1,000 of previous five years.	No.
			•••		•••	•••		•••	•••			•••		1 2 3
1 1	4 7 8 6 0 3	24 1 1 2	12 5 1 	6 5 1 8	2 16 6	2 33 2 23	200 85 150 25 88 147	57 54 135 9 49 134	257 139 285 34 137 281	0.84 0.36 0.61 0.12 0.57 0.80	0.53 0.26 0.55 0.06 0.36 0.71	0.74 0.31 0.58 0.09 0.47 0.76	1.57 0.16 0.78 0.03 0.26 1.13	4 5 6 7 8 9
3	0 5 6 5 1	8 4 2 9 	2 1 3 1	 1 	1	13	88 89 51 57 30	99 67 37 33 18	187 156 88 90 48	0.35 0.33 0.26 0.34 0.19	0.42 0.24 0.21 0.20 0.14	0.38 0.28 0.24 0.27 0.17	0.66 0.34 0.15 0.34 0.21	10 11 12 13 14
1		5		3		14 1	104 3 23	74	178 3 41	0.42 0.01 0.12	0.33	0.38 0.01 0.11	0·19 0·10 0·10	15 16 17 18 19
	9	 1 1	 8 1 	 3 1 2	 7 2 4	27 2 3	36 50 154 106	46 58 83 129	82 108 237 235	0·29 0·37 0·73 0·47	0·35 0·41 0·39 0·53	0.32 0.39 0.56 0.50	0.36 0.10 0.17 0.19	20 21 22 23
	1 1 . 3	3 3 	 6 1 	 6 42 	 1 8 13 7	1 9 5 19 17	412 31 179 251 69	400 29 182 294 71	812 60 361 545 140	2·25 0·44 1·30 1·18 0·43	2·30 0·40 1·19 1·29 0·44	2·28 0·42 1·25 1·23 0·43	2·19 0·54 1·21 0·21 0·56	24 25 26 27 28
••	1		 1 1	1 	1 5	7 19 18	58 130 18	53 156 14	111 286 32	0.32 0.84 0.11	0.26 0.91 0.07	0·29 0·87 0·09	0·39 0·61 0·55	29 30 31
18	32	66	44	79	76	215	2,634	2,299	4,933	0.48	0.44	0.46	0.44	

Annual Statement No. VI (a) (Provincial), showing Births, Birth-rate, and Infantile Mortality Statistics of Towns having a population of 10,000 or over for the year 1928.

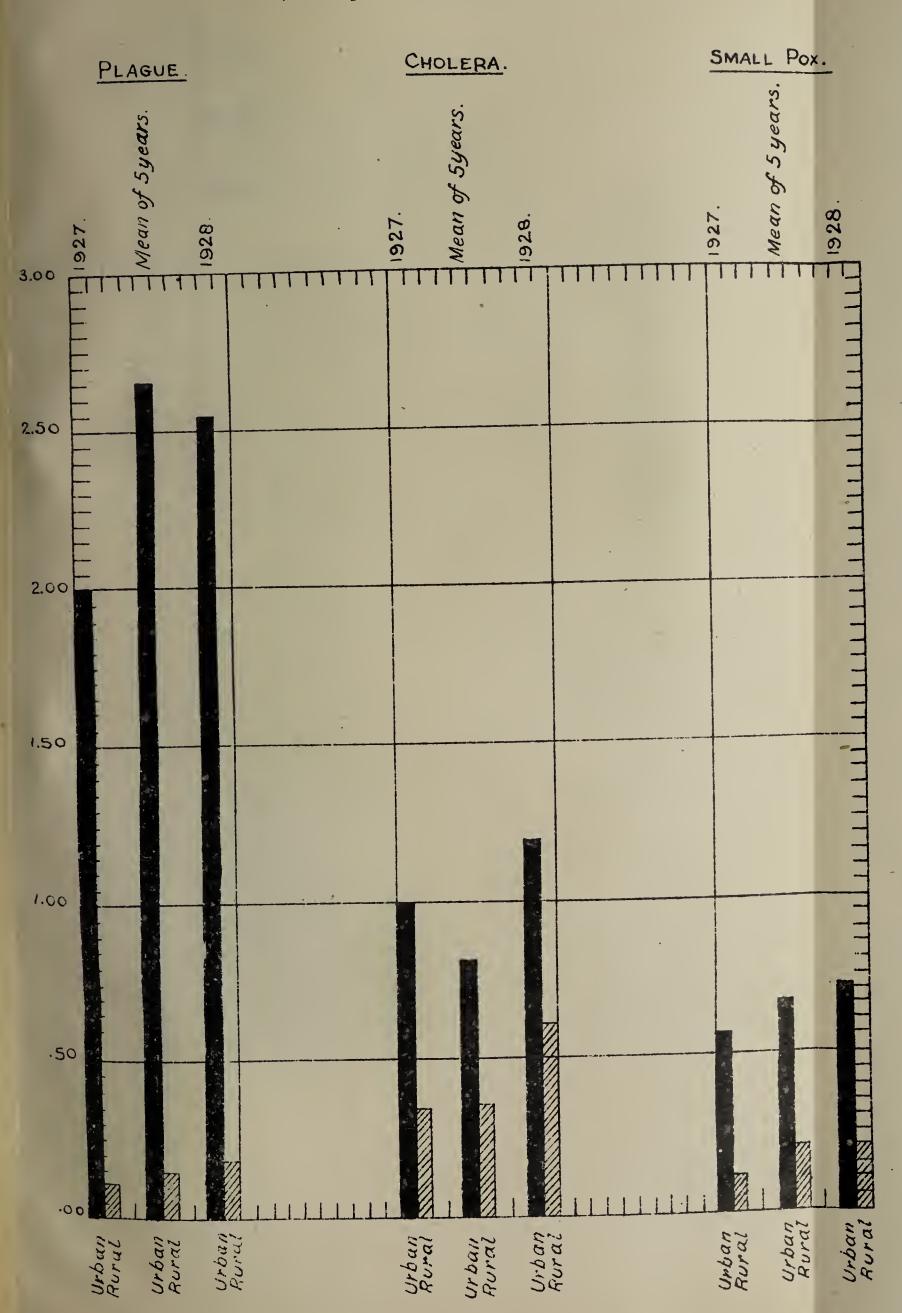
1	2		3	4			5	6			7		
_		_~	n i	Births.			D:-/1	Deaths under one year.			Infantile mortality rate.		
No.	No. Towns.		Popula• tion.	Male.	Female.	Total.	Birth- rate.	Male.	Female.	Total.	Male.	Female.	Total.
1	Rangoon	•••	345,505	3,785	3,641	7,426	21.49	1,362	1,168	2,530	359.84	320.79	340.69
2	Akyab	• • •	36,569	291	255	546	14.93	93	78	171	319.59	305.88	313.19
3	Pegu	•••	18,769	365	328	693	36.92	112	91	203	306.85	277.44	292.93
4	Syriam	• • •	15,193	164	158	322	21.19	36	31	67	219.51	196.20	208.07
5	Insein	• • •	14,308	161	149	310	21.67	54	40	94	335.40	268.46	303.23
6	Prome	•••	26,067	379	329	708	27·16	159	107	266	419.53	325.23	375.71
7	Paungdè	•••	14,154	145	142	2 87	20.28	62	48	110	427.59	338.03	383.28
8	Bassein	•••	42,563	655	644	1,299	30.2	247	196	443	377.10	305.35	341:03
9	Henzada	•••	23,651	368	330	698	29.51	127	89	216	345.11	269 70	309.46
10	Thatôn	•••	15,091	252	263	515	34.13	63	47	110	250.00	178.71	213.59
11	Moulmein	•••	61,301	833	798	1,631	26.61	213	174	387	255.70	218.05	237.28
12	Tavoy	•••	27,480	449	486	935	34.02	111	85	196	247.22	1 74 ·90	209.63
13	Mergui	•••	18,408	301	267	568	30.86	93	78	171	308.97	292.13	301.06
11	Toungoo	•••	19,332	221	250	471	24.36	32	37	69	144 [.] 80	148.00	146.50
_5	Thayetmyo	•••	10,768	96	130	226	20.98	44	46	90	458.33	353.85	398.23
16	Allanm yo	•••	11,219	120	139	259	23.09	36	40	76	300.00	287.77	293.44
17	Pakôk ku	•••	19,507	243	243	486	24.91	131	1 28	259	539.09	526.75	532.92
18	Mandalay	•••	148,917	4,174	3,553	7,727	51.89	1,459	1,134	2,593	349.54	319.17	335.28
19	Maymyo	•••	16,558	358	346	704	42.52	88	81	16 9	245.81	234.10	240.06
20	Myingyan	•••	18,931	283	244	527	27.84	129	107	236	455.83	438.52	447.82
21.	Pyinmana	•••	14,886	293	221	514	34.53	113	100	213	385.67	452.49	414.40
22	Shweb o	•••	10,605	233	220	453	42.72	106	72	178	454.94	327.27	392.94
2 3	Sagaing	•••	11,858	195	229	424	35.76	92	75	167	471.79	327.51	393.87
U													
											-		
				1	1			1		1	l/	1	

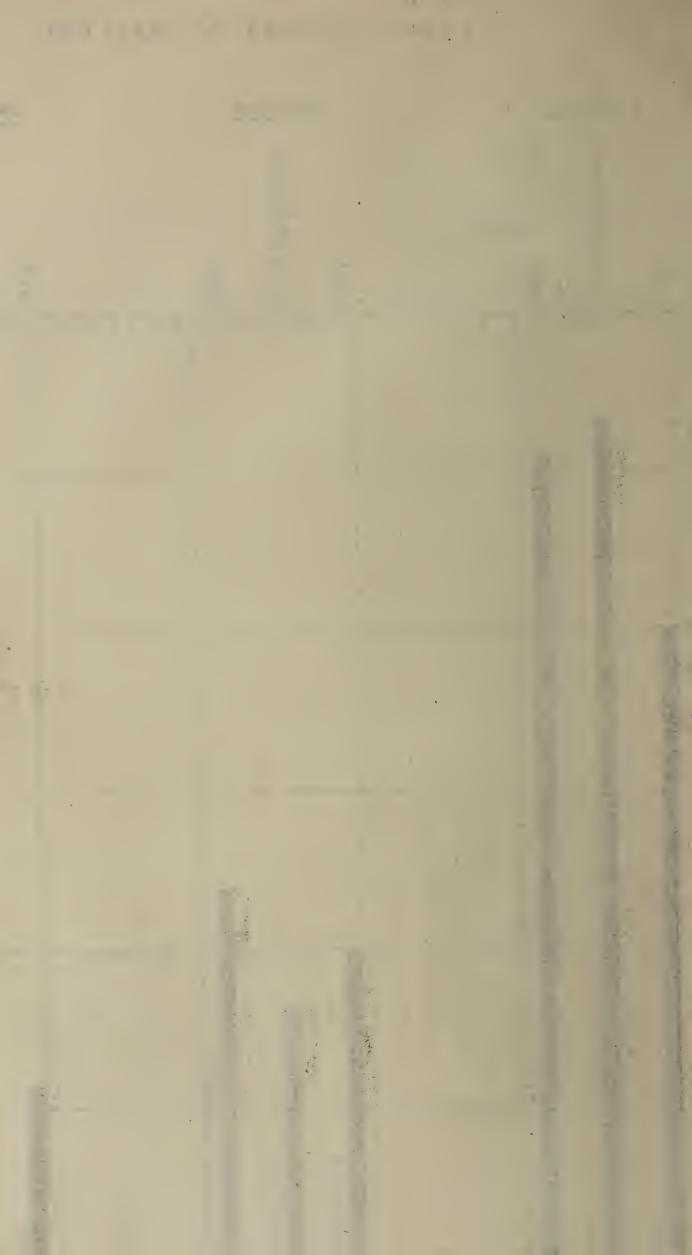
G.B.C.P.O.—No. 22, D.P.H., 7-10-1929—630.





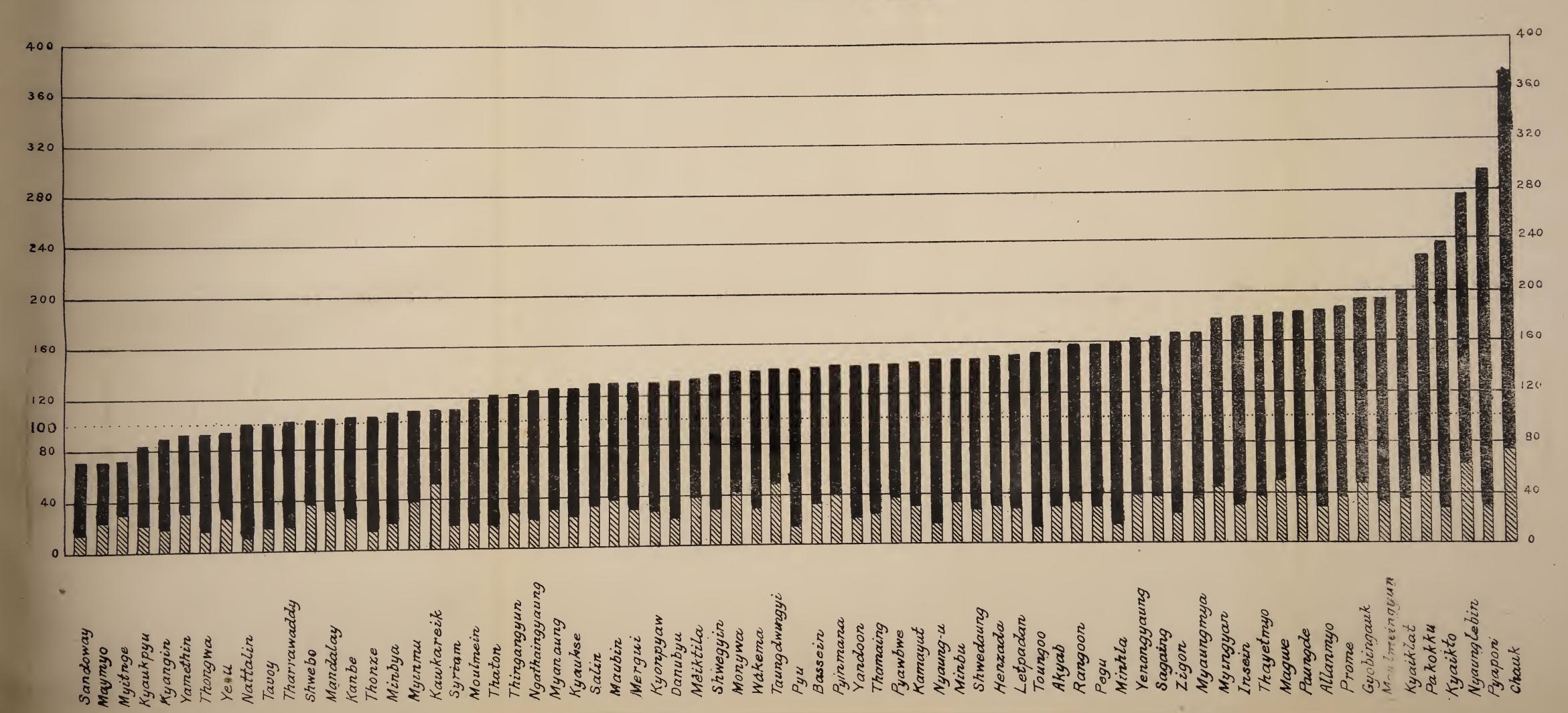
DEATH RATE IN BURMA FROM PLAGUE, CHOLERA & SMALL POX.

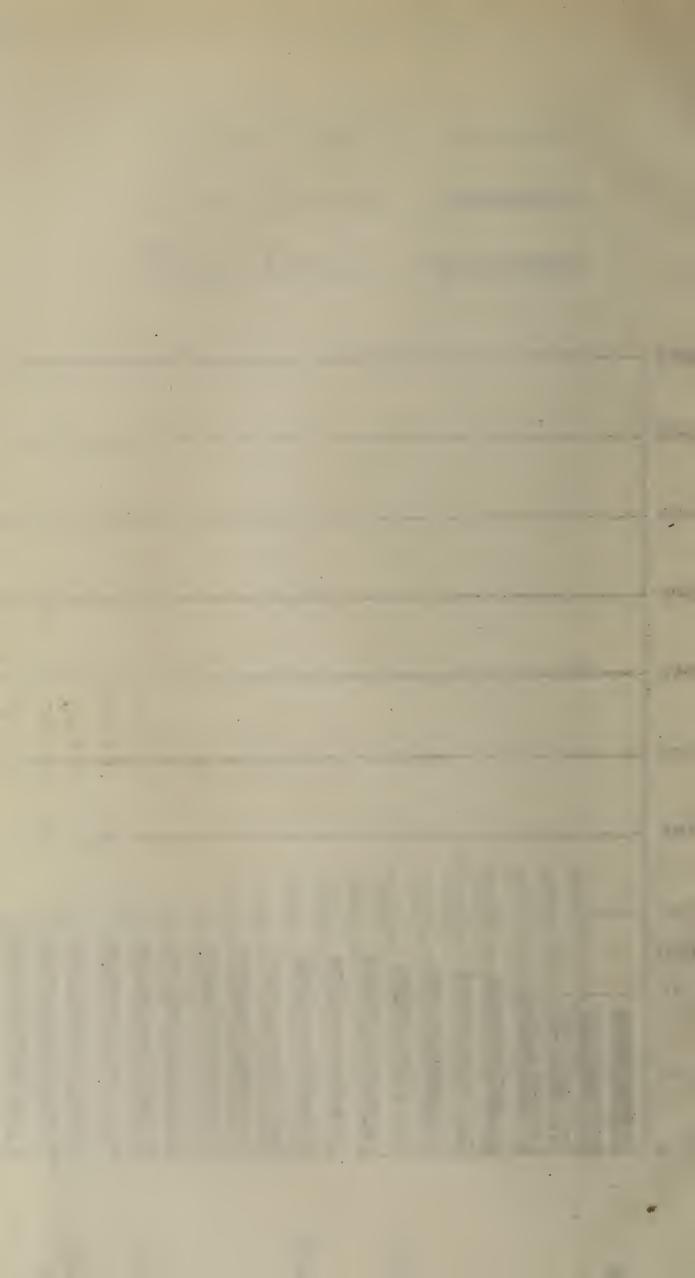




NUMBER OF DEATHS PER 100 BIRTHS IN TOWNS IN 1928.

Infant Deaths. Total Deaths.





REFERENCES.

Dysentery thus

Diarrhoea "
Total "

